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# Mark Scheme (Results)

## Summer 2024

Pearson Edexcel GCSE

In Mathematics (1MA1)

Foundation (Non-Calculator) Paper 1F

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Summer 2024

Question Paper Log Number P76922A

Publications Code 1MA1\_1F\_2406\_MS

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## General marking guidance

These notes offer general guidance, but the specific notes for examiners appertaining to individual questions take precedence.

- 1 All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.

Where some judgement is required, mark schemes will provide the principles by which marks will be awarded; exemplification/indicative content will not be exhaustive. When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the response should be sent to review.

- 2 All the marks on the mark scheme are designed to be awarded; mark schemes should be applied positively. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme. If there is a wrong answer (or no answer) indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.

**Questions where working is not required:** In general, the correct answer should be given full marks.

**Questions that specifically require working:** In general, candidates who do not show working on this type of question will get no marks – full details will be given in the mark scheme for each individual question.

- 3 **Crossed out work**

This should be marked **unless** the candidate has replaced it with an alternative response.

- 4 **Choice of method**

If there is a choice of methods shown, mark the method that leads to the answer given on the answer line.

If no answer appears on the answer line, mark both methods **then award the lower number of marks.**

- 5 **Incorrect method**

If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review for your Team Leader to check.

- 6 **Follow through marks**

Follow through marks which involve a single stage calculation can be awarded without working as you can check the answer, but if ambiguous do not award.

Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

**7 Ignoring subsequent work**

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question or its context. (eg. an incorrectly cancelled fraction when the unsimplified fraction would gain full marks).

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect (eg. incorrect algebraic simplification).

**8 Probability**

Probability answers must be given as a fraction, percentage or decimal. If a candidate gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths).

Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.

If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

**9 Linear equations**

Unless indicated otherwise in the mark scheme, full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously identified in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded (embedded answers).

**10 Range of answers**

Unless otherwise stated, when an answer is given as a range (e.g. 3.5 – 4.2) then this is inclusive of the end points (e.g. 3.5, 4.2) and all numbers within the range.

**11 Number in brackets after a calculation**

Where there is a number in brackets after a calculation E.g.  $2 \times 6 (=12)$  then the mark can be awarded **either** for the correct method, implied by the calculation **or** for the correct answer to the calculation.

**12 Use of inverted commas**

Some numbers in the mark scheme will appear inside inverted commas E.g. "12"  $\times$  50 ; the number in inverted commas cannot be any number – it must come from a correct method or process but the candidate may make an arithmetic error in their working.

**13 Word in square brackets**

Where a word is used in square brackets E.g. [area]  $\times$  1.5 : the value used for [area] does **not** have to come from a correct method or process but is the value that the candidate believes is the area. If there are any constraints on the value that can be used, details will be given in the mark scheme.

**14 Misread**

If a candidate misreads a number from the question. Eg. uses 252 instead of 255; method or process marks may be awarded provided the question has not been simplified. Examiners should send any instance of a suspected misread to review.

**Guidance on the use of abbreviations within this mark scheme**

|              |                                                                                                                                                                                          |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M</b>     | method mark awarded for a correct method or partial method                                                                                                                               |
| <b>P</b>     | process mark awarded for a correct process as part of a problem solving question                                                                                                         |
| <b>A</b>     | accuracy mark (awarded after a correct method or process; if no method or process is seen then full marks for the question are implied but see individual mark schemes for more details) |
| <b>C</b>     | communication mark awarded for a fully correct statement(s) with no contradiction or ambiguity                                                                                           |
| <b>B</b>     | unconditional accuracy mark (no method needed)                                                                                                                                           |
| <b>oe</b>    | or equivalent                                                                                                                                                                            |
| <b>cao</b>   | correct answer only                                                                                                                                                                      |
| <b>ft</b>    | follow through (when appropriate as per mark scheme)                                                                                                                                     |
| <b>sc</b>    | special case                                                                                                                                                                             |
| <b>dep</b>   | dependent (on a previous mark)                                                                                                                                                           |
| <b>indep</b> | independent                                                                                                                                                                              |
| <b>awrt</b>  | answer which rounds to                                                                                                                                                                   |
| <b>isw</b>   | ignore subsequent working                                                                                                                                                                |

[illegible]

| Paper: 1MA1/1F |           |      |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------|-----------|------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer    | Mark | Mark scheme                                                                                                                                     | Additional guidance                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 7              | Bar chart |      |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                |           | M1   | for a key, or suitable labels, to identify Lena and Pavel                                                                                       | Accept bar chart, vertical line graph, dual/multiple bar chart, composite bar chart, frequency polygon for all marks.                                                                                                                                                                                                                                                                                                                                            |
|                |           | M1   | for 3 or 4 correct labels for days <b>or</b> a linear scale present                                                                             | Accept unambiguous abbreviations for labels eg L, P                                                                                                                                                                                                                                                                                                                                                                                                              |
|                |           | M1   | for a (bar) chart correctly showing data for at least 1 person or 2 days                                                                        | Allow linear scale not starting at 0<br>Scale must be marked on grid lines.                                                                                                                                                                                                                                                                                                                                                                                      |
|                |           | C1   | for a fully correct (bar) chart with labels for days of the week, vertical axis correctly scaled and labelled and key/labels for Lena and Pavel | Bars / lines / points must be unambiguously correct for their scale (scale must be present).<br><br>Allow for correctly showing total hours worked for all four days on chart (13, 15, 13, 12)<br><br>Horizontal axis does not need an overall 'day' label<br>Condone frequency for number of hours.<br>For C mark scale must start at 0 and be linear for the range of values plotted.<br>Condone bars of unequal width<br>Condone no gaps or inconsistent gaps |

| Paper: 1MA1/1F |        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |
|----------------|--------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer | Mark | Mark scheme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Additional guidance                                                                                                                                                                                                       |
| 8 (i)          | 50     | M1   | for $360 - 220 - 90$ oe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                           |
|                |        | A1   | cao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                           |
| (ii)           | Reason | C1   | <p>for <u>angles</u> at a <u>point</u> add up to 360</p> <p>Acceptable examples</p> <ul style="list-style-type: none"> <li>• A <u>full turn</u> adds up to 360</li> <li>• <u>Full rotation</u> is 360</li> </ul> <p>Not acceptable examples</p> <ul style="list-style-type: none"> <li>• Angles in a circle add to 360</li> <li>• A whole circle adds up to 360</li> <li>• It must add up to 360 degrees</li> <li>• <math>220 + 90 = 310</math>, <math>360 - 310</math></li> <li>• Angles at a point add up to 180</li> <li>• Angles on a straight line add to 180</li> </ul> | <p>Underlined words need to be shown</p> <p>Note: If line <i>AO</i> or <i>OC</i> or <i>BO</i> is extended and used to find <math>x</math> in (i) then allow C1 for <u>angles</u> on a straight <u>line</u> add to 180</p> |

| Paper: 1MA1/1F |        |                       |                                                  |                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------|--------|-----------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer | Mark                  | Mark scheme                                      | Additional guidance                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9              | (a)    | 16                    | B1                                               | cao                                                                                                                          | +10 and $\div 2$ could be seen in a flow diagram<br>Working may be next to number machine.<br><br>Trial can be for any value, must be correctly evaluated.<br>Accept correct inverse function trial, correctly evaluated.<br>If working seen on the number machine provided in the question allow for a trial other than input 13 or output 28.<br><br>Allow $10 \times 2 = 20 - 10 = 10$ for M1C1 |
|                | (b)    | 19                    | M1                                               | starts method to find input using inverse operations<br>eg $28 + 10 (=38)$ <b>or</b> sight of +10 and $\div 2$               |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                |        |                       | A1                                               | cao                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | (c)    | Shown                 | M1                                               | for carrying out at least one trial <b>or</b> for forming a suitable equation, eg $2x - 10 = x$ <b>or</b> for identifying 10 |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                |        |                       | C1                                               | for showing that an input of 10 gives an output of 10                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 10             | 2 : 3  | M1                    | for 24 : 36 oe <b>or</b> 3 : 2 <b>or</b> 1.5 : 1 | Do not ISW from 2:3                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                |        | A1                    | 2 : 3 or 1 : 1.5                                 |                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 11             | (a)    | 3                     | B1                                               | cao                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | (b)    | 32                    | B1                                               | cao                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | (c)    | $30 \div (3 + 2) - 4$ | B1                                               | for brackets correctly placed                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                    |

| Paper: 1MA1/1F |               |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                         |
|----------------|---------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Question       | Answer        | Mark                                         | Mark scheme                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Additional guidance                                                                                     |
| 12             | 6             | P1<br><br>P1<br><br>P1<br><br>A1             | for process to find perimeter of triangle<br>eg $14 + 30 + 36 (= 80)$<br><br>for “80” $\div 4 (= 20)$<br><br>for a complete process<br>eg “20” $- 4 - 4 \div 2$ <b>or</b> “20” $\div 2 - 4$<br><br>cao                                                                                                                                                                                                                                                                     | $36 \div 4 + 14 \div 4 + 30 \div 4 (= 20)$ scores P1P1                                                  |
| 13 (a)         | 1             | B1                                           | Allow 100%                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Allow $\frac{k}{k}$<br>Do not accept 100, do not accept certain.                                        |
| (b)            | $\frac{2}{3}$ | P1<br><br><br><br><br><br><br><br><br><br>A1 | for start of process to write down proportion of each coin,<br>writes down a correct ratio, eg $1p : 2p = 2 : 1$ oe<br><b>or</b><br>a process to work out number of 1p coins <b>and</b> 2p coins,<br>eg $40 \div 2 (= 20)$ <b>and</b> $(40 \div 2) \div 2 (= 10)$<br><b>or</b><br>assigns numbers in correct proportion, eg 6 1p coins <b>and</b> 3 2p coins<br><b>or</b><br>finding the probability of a 2p coin $\left(= \frac{1}{3}\right)$<br><br>for $\frac{2}{3}$ oe | Accept any equivalent fraction, decimal form, 0.66(6...) or 0.67 or percentage form, 66(.6...) % or 67% |

| Paper: 1MA1/1F |                                                                             |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
|----------------|-----------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---------------------------------------------------------------------------|---|---|---------------------------------------------------------------------------|---|---------------------------------------------------------------------------|---|---|---------------------------------------------------------------------------|---|---|---|---|---------------------------------------------------------------------------|---|---|---|---|---|--|---|---|---|---|--|-----|----|---|----|-------|------|-----|---|-----|-----|----|
| Question       | Answer                                                                      | Mark | Mark scheme                                                                                                                                                              | Additional guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 14             | 14742                                                                       | M1   | for complete correct method with relative place value correct eg two lines of 1st method, internal numbers of grids, or complete structure shown of partitioning methods | 13650<br><u>1092</u><br>14742<br><br><table><tr><td></td><td>2</td><td>7</td><td>3</td><td></td></tr><tr><td>1</td><td><table><tr><td>1</td><td>0</td></tr><tr><td>0</td><td>8</td></tr></table></td><td><table><tr><td>3</td><td>5</td></tr><tr><td>2</td><td>8</td></tr></table></td><td><table><tr><td>1</td><td>5</td></tr><tr><td>1</td><td>2</td></tr></table></td><td>5</td></tr><tr><td></td><td>7</td><td>4</td><td>2</td><td>4</td></tr></table><br><table><tr><td></td><td>200</td><td>70</td><td>3</td></tr><tr><td>50</td><td>10000</td><td>3500</td><td>150</td></tr><tr><td>4</td><td>800</td><td>280</td><td>12</td></tr></table><br>10000 + 3500 + 150 + 800 + 280 + 12 = 14742 |   | 2 | 7 | 3                                                                         |   | 1 | <table><tr><td>1</td><td>0</td></tr><tr><td>0</td><td>8</td></tr></table> | 1 | 0                                                                         | 0 | 8 | <table><tr><td>3</td><td>5</td></tr><tr><td>2</td><td>8</td></tr></table> | 3 | 5 | 2 | 8 | <table><tr><td>1</td><td>5</td></tr><tr><td>1</td><td>2</td></tr></table> | 1 | 5 | 1 | 2 | 5 |  | 7 | 4 | 2 | 4 |  | 200 | 70 | 3 | 50 | 10000 | 3500 | 150 | 4 | 800 | 280 | 12 |
|                |                                                                             |      | 2                                                                                                                                                                        | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3 |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
|                |                                                                             | 1    | <table><tr><td>1</td><td>0</td></tr><tr><td>0</td><td>8</td></tr></table>                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0 | 0 | 8 | <table><tr><td>3</td><td>5</td></tr><tr><td>2</td><td>8</td></tr></table> | 3 | 5 | 2                                                                         | 8 | <table><tr><td>1</td><td>5</td></tr><tr><td>1</td><td>2</td></tr></table> | 1 | 5 | 1                                                                         | 2 | 5 |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 1              | 0                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 0              | 8                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 3              | 5                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 2              | 8                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 1              | 5                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 1              | 2                                                                           |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
|                | 7                                                                           | 4    | 2                                                                                                                                                                        | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
|                | 200                                                                         | 70   | 3                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 50             | 10000                                                                       | 3500 | 150                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| 4              | 800                                                                         | 280  | 12                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| M1             | (dep on M1) for addition of all the appropriate elements of the calculation |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |
| A1             | cao                                                                         |      |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |                                                                           |   |   |                                                                           |   |                                                                           |   |   |                                                                           |   |   |   |   |                                                                           |   |   |   |   |   |  |   |   |   |   |  |     |    |   |    |       |      |     |   |     |     |    |

| Paper: 1MA1/1F |            |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                  |
|----------------|------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer     | Mark | Mark scheme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Additional guidance                                                                                                                                                                                                                                                              |
| 15 (a)         | 64         | B1   | cao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                  |
| (b)            | 36         | M1   | for identifying 81 and 45 as the key numbers,<br>eg 81 – 45 or 45 – 81 or 45 to 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | It is insufficient to identify these on the diagram (eg as 1, 5)                                                                                                                                                                                                                 |
|                |            | A1   | cao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Answer of –36 gets M1A0                                                                                                                                                                                                                                                          |
| (c)            | comparison | C1   | for a correct comparison of medians that could fit their incorrect median in (a)<br><br><b>Acceptable examples</b><br>The adults were faster because they have the smaller median<br>The adults were [11] minutes faster (on average)<br>The adults were faster<br>The adults took less time<br>The children were slower<br>The children took more time<br>Children took [11] minutes more (on average)<br>Children had a larger median than the adults.<br><br><b>Not acceptable examples</b><br>The children were faster<br>The adults median was 64, the children's median was 75<br>11 minutes difference<br>The children had more time to run than the adults | Statement must be entirely true and not contradictory<br>Figures not required in comparison, but if seen must be correct.<br><br>Where [11] is the difference between 75 and their (a).<br><br>If median in (a) is greater than 75 then converse statements would be correct ft. |

| Paper: 1MA1/1F |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------|---------|---------|--------|---------|------|---------|---------|------|------|------|---|-------------|------|------|---|------|-------------|------|----|------|------|-------------|----|------|------|------|----|-------|------|-------|
| Question       | Answer                                                                                                                                                                                                                                                                                                                                                                                                | Mark                                                                                                                                                                                                                                                                                                                                                                                                                              | Mark scheme                                                                                                                                                                                                                                                                                                                                       | Additional guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 16             | Pack of 8 (supported)                                                                                                                                                                                                                                                                                                                                                                                 | P1                                                                                                                                                                                                                                                                                                                                                                                                                                | for a process (for at least 2 packs) of division of price by quantity eg at least 2 of $180 \div 4 (= 45)$ <b>or</b> $320 \div 8 (= 40)$ <b>or</b> $600 \div 12 (= 50)$<br><br><b>OR</b> any other process that could lead to a comparison of 2 packs eg $180 \times 2 (= 360)$ <b>or</b> $320 \div 8 (= 40)$ <b>and</b> “40” $\times 12 (= 480)$ | Calculations could be in pounds or in pence<br><table><tr><td></td><td>4 pack</td><td>8 pack</td><td>12 pack</td></tr><tr><td>1</td><td>0.45</td><td>0.40</td><td>0.50</td></tr><tr><td>2</td><td>0.90</td><td>0.80</td><td>1.00</td></tr><tr><td>4</td><td><b>1.80</b></td><td>1.60</td><td>2.00</td></tr><tr><td>8</td><td>3.60</td><td><b>3.20</b></td><td>4.00</td></tr><tr><td>12</td><td>5.40</td><td>4.80</td><td><b>6.00</b></td></tr><tr><td>16</td><td>7.20</td><td>6.40</td><td>8.00</td></tr><tr><td>24</td><td>10.80</td><td>9.60</td><td>12.00</td></tr></table> |                     | 4 pack | 8 pack  | 12 pack | 1      | 0.45    | 0.40 | 0.50    | 2       | 0.90 | 0.80 | 1.00 | 4 | <b>1.80</b> | 1.60 | 2.00 | 8 | 3.60 | <b>3.20</b> | 4.00 | 12 | 5.40 | 4.80 | <b>6.00</b> | 16 | 7.20 | 6.40 | 8.00 | 24 | 10.80 | 9.60 | 12.00 |
|                |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4 pack                                                                                                                                                                                                                                                                                                                                            | 8 pack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 12 pack             |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
|                |                                                                                                                                                                                                                                                                                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.45                                                                                                                                                                                                                                                                                                                                              | 0.40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.50                |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 2              | 0.90                                                                                                                                                                                                                                                                                                                                                                                                  | 0.80                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.00                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 4              | <b>1.80</b>                                                                                                                                                                                                                                                                                                                                                                                           | 1.60                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.00                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 8              | 3.60                                                                                                                                                                                                                                                                                                                                                                                                  | <b>3.20</b>                                                                                                                                                                                                                                                                                                                                                                                                                       | 4.00                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 12             | 5.40                                                                                                                                                                                                                                                                                                                                                                                                  | 4.80                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>6.00</b>                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 16             | 7.20                                                                                                                                                                                                                                                                                                                                                                                                  | 6.40                                                                                                                                                                                                                                                                                                                                                                                                                              | 8.00                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 24             | 10.80                                                                                                                                                                                                                                                                                                                                                                                                 | 9.60                                                                                                                                                                                                                                                                                                                                                                                                                              | 12.00                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| P1             | for a complete process to give values that can be used for comparison of all 3 packs eg $180 \div 4 (= 45)$ <b>and</b> $320 \div 8 (= 40)$ <b>and</b> $600 \div 12 (= 50)$ <b>OR</b> $3.20 \div 8 (= 0.40)$ <b>and</b> “0.40” $\times 4 (= 1.60)$ <b>and</b> “0.40” $\times 12 (= 4.80)$ <b>OR</b> $1.80 \times 6 (= 10.80)$ <b>and</b> $3.20 \times 3 (= 9.60)$ <b>and</b> $6.00 \times 2 (= 12.00)$ | Condone incorrect units.<br><br>Pairwise comparison are possible, but check to see that this allows for a decision to be made. Check process.<br>Assuming correct figures found: <table><tr><td colspan="2">Comparisons</td><td>Conclusion possible</td></tr><tr><td>4 vs 8</td><td>8 vs 12</td><td>Yes</td></tr><tr><td>4 vs 8</td><td>4 vs 12</td><td>Yes</td></tr><tr><td>4 vs 12</td><td>8 vs 12</td><td>No</td></tr></table> | Comparisons                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Conclusion possible | 4 vs 8 | 8 vs 12 | Yes     | 4 vs 8 | 4 vs 12 | Yes  | 4 vs 12 | 8 vs 12 | No   |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| Comparisons    |                                                                                                                                                                                                                                                                                                                                                                                                       | Conclusion possible                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 4 vs 8         | 8 vs 12                                                                                                                                                                                                                                                                                                                                                                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 4 vs 8         | 4 vs 12                                                                                                                                                                                                                                                                                                                                                                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| 4 vs 12        | 8 vs 12                                                                                                                                                                                                                                                                                                                                                                                               | No                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |
| A1             | for ‘pack of 8’ and correct values that can be used to compare all 3 packs                                                                                                                                                                                                                                                                                                                            | Correct answer with no supportive working scores 0 marks.<br><br>Do not allow A mark where inconsistent units would prevent comparison e.g. 0.40p and 45p                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |        |         |         |        |         |      |         |         |      |      |      |   |             |      |      |   |      |             |      |    |      |      |             |    |      |      |      |    |       |      |       |



| Paper: 1MA1/1F |                    |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                   |
|----------------|--------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Question       | Answer             | Mark | Mark scheme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Additional guidance                                                                                               |
| 21 (a)         | $2\frac{2}{15}$    | M1   | for a method to subtract using a common denominator with at least one fraction correct (suitable common denominator for original fractions with at least one correct numerator)<br>eg $\frac{57}{15} - \frac{25}{15}$ or $(3)\frac{12}{15} - (1)\frac{10}{15}$                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Use of decimals gets no credit unless it leads to a correct fraction                                              |
|                |                    | A1   | for $2\frac{2}{15}$ oe eg $\frac{32}{15}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ISW incorrect conversion from improper fraction to mixed number or incorrect simplification of improper fraction. |
| (b)            | Mistake identified | C1   | for explaining that Kevin did not convert to the correct mixed number<br><br><b>Acceptable examples</b><br>In his answer $\frac{9}{24}$ should have been $\frac{11}{24}$<br>The 9 should be 11<br>He has not got the numerator right in his final answer<br>He simplified into the mixed number incorrectly<br>He has not put the remainder as the numerator<br>$1\frac{9}{24}$ would give you $\frac{33}{24}$ rather than $\frac{35}{24}$<br>$\frac{35}{24} = 1\frac{11}{24}$<br><br><b>Not acceptable examples</b><br>He should have used a common denominator<br>He has not simplified his answer<br>He should have done keep, flip, change<br>He converted the fraction wrongly<br>The answer should be $1\frac{10}{24}$ | Figures may be seen in the question space.                                                                        |

| Paper: 1MA1/1F |                              |      |                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                       |
|----------------|------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer                       | Mark | Mark scheme                                                                                                                                                                                                                                                                                                                                                                                                                     | Additional guidance                                                                                                                                                                                                                                   |
| 22 (a)         | Yes<br>(supported)           | P1   | for a process to find the area of one shape,<br>eg $10 \times 8 (= 80)$ <b>or</b> $10 \times 5 (= 50)$ <b>or</b> $8 \times 6 (= 48)$<br><b>or</b> $(10 - 6) \times 5 (= 20)$ <b>or</b> $(10 - 6) \times (8 - 5) (= 12)$<br><b>or</b> $6 \times (8 - 5) (= 18)$ <b>or</b> $5 \times 6 (= 30)$                                                                                                                                    | Do not award this mark if they go on to multiply by a third length                                                                                                                                                                                    |
|                |                              | P1   | for a complete process to find the total area,<br>eg “80” – “12” (= 68) or “50” + “18” (= 68) or “48” + “20” (= 68)                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                       |
|                |                              | P1   | for a complete process to find the area covered by 3 tins<br>eg $3 \times 2.5 \times 10 (= 75)$<br><b>or</b> for a complete process to find the number of litres needed<br>eg “68” $\div 10 (= 6.8)$ or [area] $\div 10$<br><b>or</b> for a complete process to find the number of tins needed<br>eg “68” $\div 10 \div 2.5 (= 2.72)$ or [area] $\div 10 \div 2.5$                                                              |                                                                                                                                                                                                                                                       |
|                |                              | A1   | for ‘Yes’ supported by correct figures<br>eg 68 (m <sup>2</sup> ) <b>and</b> 75 (m <sup>2</sup> )<br><b>or</b> 6.8 (litres) <b>and</b> 7.5 (litres)<br><b>or</b> 68 (m <sup>2</sup> ) <b>and</b> 2.72 (tins needed)                                                                                                                                                                                                             |                                                                                                                                                                                                                                                       |
|                | (b) No effect<br>(supported) | C1   | ft from (a) for “has no effect” with reason<br><br><b>Acceptable examples</b><br>No effect, she will need less paint<br>It won’t change, she will still have enough<br>No, she will have more paint left over<br>No, as this will cover 82.5m <sup>2</sup><br><br><b>Not acceptable examples</b><br>Petra will need less paint<br>She will have more paint left over<br>She won’t have enough paint<br>She will need more paint | Ignore incorrect amount of paint left over if correct figures seen.<br><br>Must have a decision in (a).<br><br>Must include a decision eg yes / no / no effect.<br>If figures included in the statement they must be correct for their [area] in (a). |

| Paper: 1MA1/1F |                        |      |                                                                                                                                                                                                                   |                                                                                                         |
|----------------|------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Question       | Answer                 | Mark | Mark scheme                                                                                                                                                                                                       | Additional guidance                                                                                     |
| 23 (a)         | 10, 11, 13, 14, 16, 17 | B1   | cao                                                                                                                                                                                                               | Accept any equivalent fraction, decimal form, 0.55(5...) or 0.56 or percentage form, 55(.5...) % or 56% |
| (b)            | $\frac{5}{9}$          | M1   | for identification of 10, 12, 14, 15, 18<br><b>or</b><br>for $\frac{a}{9}$ where $1 \leq a \leq 8$ , $a$ an integer, or $\frac{5}{b}$ where $b > 5$ , $b$ an integer<br><b>or</b><br>for incorrect form, eg 5 : 9 |                                                                                                         |
|                |                        | A1   | oe                                                                                                                                                                                                                |                                                                                                         |

| Paper: 1MA1/1F |                                  |      |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                    |
|----------------|----------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer                           | Mark | Mark scheme                                                                                                                                                                                                                 | Additional guidance                                                                                                                                                                                                                                                                                                                |
| 24 (a)         | Estimated value                  | P1   | for using a value rounded to 1sf in a calculation<br>eg $500 \div 10$ <b>or</b> $500 \times 0.8$ <b>or</b> $510 \times 0.8$ <b>or</b> $513 \times 0.8$ <b>or</b> $500 \times 0.81$                                          | Their rounded value must be used in a calculation<br><br>Rounding may occur after a correct process, eg<br>$513 \div 10 = 51.3 \approx 50$ and $50 \times 0.81$<br>$513 \div 10 = 51.3 \approx 51$ and $51 \times 0.8$<br>scores P1P1<br><br>Accept 0.81 rounded to 0.80 for this mark<br>Condone 0.81 rounded to 1 for this mark. |
|                |                                  | P1   | for a full process to find the total amount<br>eg $500 \div 10 \times 0.8 (= 40)$ <b>or</b> $510 \div 10 \times 0.8 (= 40.8)$<br><b>or</b> $500 \div 10 \times 0.81 (= 40.5)$<br>or [distance] $\div 10 \times$ [amount] oe | Where [distance] is their rounded 513 or 513 and [amount] is their rounded 0.81 or 0.81<br>Accept $513 \div 10 \times 0.81$ for this mark.                                                                                                                                                                                         |
|                |                                  | A1   | for a correct answer following through their correct rounded value(s)                                                                                                                                                       | Do not award this mark if 0.81 is rounded to 1                                                                                                                                                                                                                                                                                     |
|                | (b)<br>underestimate with reason | C1   | ft from (a)<br>eg underestimate as numbers rounded down                                                                                                                                                                     | Must relate to estimation and not rounding of their final answer and they must have a final answer to part (a)                                                                                                                                                                                                                     |

| Paper: 1MA1/1F |                        |      |                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                  |
|----------------|------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Answer                 | Mark | Mark scheme                                                                                                                                                                                                                                                                                                              | Additional guidance                                                                                                                              |
| 25 (a)         | $y = \frac{3}{2}x + 3$ | M1   | for a correct method to find the gradient of the line,<br>eg $\frac{6-3}{2-0} (= \frac{3}{2})$<br><br><b>or</b> identifies 3 as the intercept in words or in a partial equation<br><br><b>or</b> for $y = [\frac{3}{2}]x + c$<br><br><b>or</b> for $y - b = [\frac{3}{2}](x - a)$ where $(a, b)$ is a correct coordinate | Just circling 3 is insufficient<br><br>$[\frac{3}{2}]$ must be identifiable as their gradient<br>$c$ must be seen either as a letter or a number |
|                |                        | M1   | for $y = \frac{3}{2}x (+c)$ oe <b>or</b> for $y = “\frac{3}{2}”x + 3, m \neq 0$ <b>or</b> (L =) $\frac{3}{2}x + 3$<br><br><b>or</b> $y - y_1 = \frac{3}{2}(x - x_1)$ <b>or</b> $y - b = “\frac{3}{2}”(x - a)$ where $(a, b)$ is a correct coordinate                                                                     | Award of this mark implies the first M1                                                                                                          |
|                |                        | A1   | oe                                                                                                                                                                                                                                                                                                                       | Any correct equation gets 3 marks                                                                                                                |
| (b)            | Equation               | B1   | for $y = 5x + c, c \neq 0$ oe                                                                                                                                                                                                                                                                                            | May be in any equivalent form                                                                                                                    |

| Paper: 1MA1/1F |        |      |                                                                                                                                        |                     |
|----------------|--------|------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Question       | Answer | Mark | Mark scheme                                                                                                                            | Additional guidance |
| 26             | 7.5    | P1   | for process to find the number of empty jars<br>eg $3 \div 8 \times 400$ oe (= 150)                                                    |                     |
|                |        | P1   | for start of process to deal with ratios<br>eg 3 : 4 and 4 : 8 <b>or</b> 3 : 4 : 8 oe                                                  |                     |
|                |        | P1   | for process to find the number of empty small jars<br>eg $\frac{3}{3+4+8} \times "150"$ oe (= 30) <b>or</b> 30 : 40 : 80               |                     |
|                |        | P1   | for process to find percentage, eg $\frac{"30"}{400} \times 100$ oe or $\frac{"7.5"}{100}$                                             |                     |
|                |        | A1   | for 7.5 or $7\frac{1}{2}$ oe                                                                                                           |                     |
|                |        |      | <b>OR</b>                                                                                                                              |                     |
|                |        | P1   | for start of process to deal with ratios<br>eg 3 : 4 and 4 : 8 <b>or</b> 3 : 4 : 8 oe                                                  |                     |
|                |        | P1   | for process to find the proportion of the empty jars that are small<br>eg $\frac{3}{3+4+8} (= \frac{1}{5})$                            |                     |
|                |        | P1   | for process to find the proportion of Kasim's jars that are empty small jars<br>eg $\frac{3}{8} \times "\frac{1}{5}" (= \frac{3}{40})$ |                     |
|                |        | P1   | for process to find percentage, eg $"\frac{3}{40}" \times 100$ oe or $\frac{"7.5"}{100}$                                               |                     |
|                |        | A1   | for 7.5 or $7\frac{1}{2}$ oe                                                                                                           |                     |



## **Modifications to the mark scheme for Modified Large Print (MLP) papers: 1MA1 1F**

Only mark scheme amendments are shown where the enlargement or modification of the paper requires a change in the mark scheme. Notes apply to both MLP papers and Braille papers unless otherwise stated.

The following tolerances should be accepted on marking MLP papers, unless otherwise stated below:

Angles:  $\pm 5^\circ$

Measurements of length:  $\pm 5$  mm

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| PAPER: 1MA1_1F |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |
|----------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Question       |     | Modification                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mark scheme notes    |
| 3              | (a) | Diagram enlarged.<br>Wording added ‘Look at the diagram for Question 3 in the separate Diagram Booklet.<br>The diagram is NOT accurately drawn.<br>The diagram shows an angle labelled y.’                                                                                                                                                                                                                                                         | Standard mark scheme |
| 4              |     | Word ‘five’ added ‘Write these five numbers in order of size.’                                                                                                                                                                                                                                                                                                                                                                                     | Standard mark scheme |
| 7              |     | Word ‘below’ added ‘The table below shows the number...’<br>The table is turned vertically in the Question Paper.<br>Wording added ‘Look at the diagram for Question 7 in the separate Diagram Booklet.<br>The diagram is a grid.’<br>Sentence changed ‘On the grid, create a suitable diagram or chart for this information.’<br>For Braille: sentence added ‘A spare tactile diagram, sticky labels and bumpons are provided for this question.’ | Standard mark scheme |
| 8              |     | Diagram enlarged.<br>Wording added ‘Look at the diagram for Question 8 in the separate Diagram Booklet.<br>The diagram is NOT accurately drawn.’<br>The diagram shows three straight lines OA, OB and OC.<br>Angle AOC = 220° Angle AOB = x Angle BOC = 90°                                                                                                                                                                                        | Standard mark scheme |
| 9              |     | Sentence changed ‘Look at the number machine below.’                                                                                                                                                                                                                                                                                                                                                                                               | Standard mark scheme |
| 12             |     | Diagram enlarged. Letters added to corners of triangle (ABC) and rectangle (PQRS).<br>Wording added ‘Look at the diagram for Question 12 in the separate Diagram Booklet.<br>The diagram is NOT accurately drawn.’<br>The diagram shows a triangle labelled ABC and a rectangle labelled PQRS.<br>In the triangle ABC:<br>AB = 36 cm AC = 30 cm BC = 14 cm<br>In the rectangle PQRS:<br>PQ shows the length of the rectangle.<br>PS = 4 cm’        | Standard mark scheme |

| PAPER: 1MA1_1F |                                                                                                                                                                                                                                                                                                                                                                                     |                      |             |              |       |       |       |                      |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------|--------------|-------|-------|-------|----------------------|
| Question       | Modification                                                                                                                                                                                                                                                                                                                                                                        | Mark scheme notes    |             |              |       |       |       |                      |
| 15             | <p>Wording added 'Look at the diagram for Question 15 in the separate Diagram Booklet.<br/>It shows a stem and leaf diagram.'</p> <p>Sentence changed: 'She showed her results in the stem and leaf diagram.'</p>                                                                                                                                                                   | Standard mark scheme |             |              |       |       |       |                      |
| 16             | <p>Diagram of batteries removed. Information put in boxes</p> <table> <tr> <td>4 batteries</td><td>8 batteries</td><td>12 Batteries</td></tr> <tr> <td>£1.80</td><td>£3.20</td><td>£6.00</td></tr> </table>                                                                                                                                                                         | 4 batteries          | 8 batteries | 12 Batteries | £1.80 | £3.20 | £6.00 | Standard mark scheme |
| 4 batteries    | 8 batteries                                                                                                                                                                                                                                                                                                                                                                         | 12 Batteries         |             |              |       |       |       |                      |
| £1.80          | £3.20                                                                                                                                                                                                                                                                                                                                                                               | £6.00                |             |              |       |       |       |                      |
| 19             | <p>Wording added: Look at the diagram for Question 19 in the separate Diagram Booklet.<br/>The diagram shows Triangle A and Triangle B on a coordinate grid.<br/>Describe fully the SINGLE transformation that maps Triangle A onto Triangle B.<br/>You may be given a cut out triangle for this question.'</p> <p>Labels on triangles changed to 'Triangle A' and 'Triangle B'</p> | Standard mark scheme |             |              |       |       |       |                      |
| 22             | <p>Diagram enlarged. Letters added to diagram (ABCDEF).</p> <p>Wording added: 'Look at the diagram for Question 22 in the separate Diagram Booklet.<br/>The diagram is NOT accurately drawn.<br/>The diagram shows a plan of a floor labelled ABCDEF.<br/>In the diagram:<br/>AB = 10 m BC = 5 m EF = 6 m FA = 8 m</p>                                                              | Standard mark scheme |             |              |       |       |       |                      |
| 23             | <p>Diagram enlarged. Labels changed to 'Set P' and 'Set Q'.</p> <p>Wording added 'Look at the diagram for Question 23 in the separate Diagram Booklet.<br/>The diagram shows a Venn diagram with Set P and Set Q.'</p>                                                                                                                                                              | Standard mark scheme |             |              |       |       |       |                      |
| 25             | <p>Diagram enlarged.</p> <p>Wording added 'Look at the diagram for Question 25 in the separate Diagram Booklet.<br/>The diagram shows a straight line L drawn on a coordinate grid.'</p>                                                                                                                                                                                            | Standard mark scheme |             |              |       |       |       |                      |

