

| Paper 1MA1: 2F |             |                               |                                                                               |
|----------------|-------------|-------------------------------|-------------------------------------------------------------------------------|
| Question       | Working     | Answer                        | Notes                                                                         |
| 1              |             | 7000                          | B1    cao                                                                     |
| 2              |             | -5°C, -2°C,<br>3°C, 7°C, 10°C | B1    correct order                                                           |
| 3              |             | $\frac{3}{40}$                | M1 $\frac{75}{1000}$ oe<br><br>A1                                             |
| 4              |             | 625                           | B1    cao                                                                     |
| 5              | 720 000 ÷ 3 | 240 000                       | P1    for division by 3<br>A1    cao                                          |
| 6 (a)          |             | 1 hr 4 mins                   | B1    cao                                                                     |
| (b)            |             | No + explanation              | B1    for no + explanation, eg the 0717 from Swindon takes less than one hour |

| Paper 1MA1: 2F |                                                                                                                                        |  | Answer           | Notes                                                                                                                                                                                                                  |
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| Question       | Working                                                                                                                                |  |                  |                                                                                                                                                                                                                        |
| 7              | $2 \times £1.10 (= £2.20)$<br>$3 \times £0.95 (= £2.85)$<br>$5 \times £2.15 (= £10.75)$<br>$£2.20 + £2.85 + £10.75$<br>$£15.80 \div 5$ |  | 3.16             | P1 for process of working out total cost of coffees or teas or sandwiches in pence or pounds<br><br>P1 for process of finding total cost using consistent units<br>P1 for process of dividing by 5<br>A1 cao           |
| 8              |                                                                                                                                        |  | Banana           | B1 cao                                                                                                                                                                                                                 |
| (a)            |                                                                                                                                        |  | 20               | B1 cao                                                                                                                                                                                                                 |
| (b)            |                                                                                                                                        |  | explanation      | C2                                                                                                                                                                                                                     |
| (c)            |                                                                                                                                        |  |                  | for full explanation, eg table shows exactly $\frac{1}{2}$ ;<br>pie chart shows less than $\frac{1}{2}$ as angle is less than $180^\circ$<br>(C1 for partial explanation or reference to just pie chart or just table) |
| 9              |                                                                                                                                        |  | No + explanation | C1 No, with explanation, eg the angle will still be $25^\circ$                                                                                                                                                         |
| 10             |                                                                                                                                        |  | 6.4 – 6.6        | B1 for 6.4 – 6.6                                                                                                                                                                                                       |
| (a)            |                                                                                                                                        |  | 9.8              | B1 for 9.75 – 9.85                                                                                                                                                                                                     |
| (b)            |                                                                                                                                        |  | 5, 9             | B1 cao                                                                                                                                                                                                                 |
| (c)            |                                                                                                                                        |  |                  |                                                                                                                                                                                                                        |

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| Question       | Working | Answer      | Notes                                                                                                                                                                                                                              |
| 11 (a)         |         | rule stated | C1<br>for rule stated, eg number doubles                                                                                                                                                                                           |
| (b)            |         | 32          | B1<br>cao                                                                                                                                                                                                                          |
| (c)            |         | 22, 29      | B1<br>cao                                                                                                                                                                                                                          |
| 12             |         | 0.8         | P1<br>for process to find amount of soup put in bowls,<br>eg $24 \times 0.3$ or amount of soup when 8 pints are<br>shared between 24 bowls, eg $24 \div 8$<br>P1<br>for complete process to find amount of soup left<br>over<br>A1 |
| 13             |         | 46          | M1<br>for process to find value after 1 year<br>M1<br>for process to find value after 4 years<br>A1<br>cao                                                                                                                         |
| 14             |         | 3p          | M1<br>for method to find gradient of line<br>A1<br>for 3p oe                                                                                                                                                                       |

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| Question       | Working | Answer              | Notes                                                                                                                                                                                                                                                                                                      |
| 15 (a)         |         | 10                  | P1 for process to find number of people that Ellie can make mousse for using the sugar available<br>P1 for process to find number of people that Ellie can make mousse for using the chocolate available<br>A1 for correct answer with supportive working<br>C1 for “can only make mousse for 6 people” oe |
| (b)            |         | correct explanation |                                                                                                                                                                                                                                                                                                            |
| 16             |         | 8                   | B1 cao                                                                                                                                                                                                                                                                                                     |
| 17 (a)         |         | $4x + 6y$           | M1 for $4x$ or $6y$<br>A1 for $4x + 6y$ or $2(2x + 3y)$                                                                                                                                                                                                                                                    |
| (b)            |         | $5(2x - 3)$         | B1 cao                                                                                                                                                                                                                                                                                                     |
| (c)            |         | 4                   | M1 for method to isolate terms in $p$ on one side and constants on the other side<br>A1 cao                                                                                                                                                                                                                |
| 18             |         | 3 : 4               | M1 for $32 - 8 (= 24)$<br>M1 (dep) for “24” : 32<br>A1 cao                                                                                                                                                                                                                                                 |

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|----------------|---------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Working | Answer                                                    | Notes                                                                                                                              |
| 19 (a)         |         | Table complete                                            | B1<br>cao                                                                                                                          |
| (bi)           |         | $\frac{1}{10}$                                            | B1<br>for $\frac{1}{10}$ oe or ft from table                                                                                       |
| (bii)          |         | $\frac{7}{10}$                                            | B1<br>for $\frac{7}{10}$ oe or ft from table                                                                                       |
| 20             |         | 1.52                                                      | M1<br>A1<br>for $20 \times 4.55 \div 60$<br>for 1.52 or 1.516(...)                                                                 |
| 21             |         | 8                                                         | M1<br>A1<br>for finding the HCF of any two of the three numbers <b>or</b> for $2^5$ and $3 \times 2^4$ and $2^3 \times 3^2$<br>cao |
| 22             |         | Translation<br>by $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$ | B1<br>for translation<br><br>B1<br>$\begin{pmatrix} 4 \\ -3 \end{pmatrix}$                                                         |

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|----------------|---------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Question       | Working | Answer          | Notes                                                                                                                                                                                             |
| 23 (a)         |         | Trend described | C1 for “percentage of people who use the shop decreases” oe                                                                                                                                       |
| (bi)           |         | 13 - 17         | P1 for process to draw trend line on graph<br>A1 for 13 - 17                                                                                                                                      |
| (bii)          |         | No + reason     | C1 for comment, eg “no, because 2020 is beyond the time period covered by the given data”                                                                                                         |
| 24 (a)         |         | $13y - 1$       | M1 for expansion of one bracket<br>A1 for full simplification                                                                                                                                     |
| (b)            |         | $35u^3w^7$      | B1 for 2 of $35$ , $u^3$ and $w^7$ correct<br>B1 cao                                                                                                                                              |
| 25             |         | 105             | P1 for process to find the exterior angle or interior angle of a hexagon or octagon<br>P1 for process to find the both exterior angles or both interior angles<br>A1 for 105 from correct working |

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| Question       | Working                                                                                                                                                   | Answer                 | Notes                                                                                                                                                                 |
| 26 (a)(i)      |                                                                                                                                                           | 10, 12, 14, 15, 16, 18 | B1<br>cao                                                                                                                                                             |
| (ii)           |                                                                                                                                                           | 12, 18                 | B1<br>cao                                                                                                                                                             |
| (b)            |                                                                                                                                                           | $7\frac{7}{10}$        | M1<br>for 7 or indicating correct region or for 10, 14, 16, 11, 13, 17, 19 listed                                                                                     |
|                |                                                                                                                                                           |                        | A1<br>for $\frac{7}{10}$ oe                                                                                                                                           |
| 27             | $6 : 5 = 12 : 10$<br>$2 : 1 = 10 : 5$<br>$C : S : P = 12 : 10 : 5$<br>$\frac{10}{27} \times 189$                                                          | 70                     | P1<br>for strategy to start to solve the problem<br>eg 12 : 10 and 10 : 5<br><br>P1<br>for process to solve the problem<br>eg $\frac{10}{27} \times 189$<br>A1<br>cao |
| 28             | $\frac{1}{4} \times \pi \times 4.8^2$<br>$\frac{1}{2} \times 4.8 \times 4.8$<br>$\frac{1}{4} \times \pi \times 4.8^2 - \frac{1}{2} \times 4.8 \times 4.8$ | 6.58                   | B1<br>for use of formula for area of a circle<br><br>P1<br>for complete process to find area of shaded region<br>A1<br>for 6.56 – 6.58                                |

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| Question       | Working                                                                                                                                                                                                                                                                                                                                                                                                                | Answer       | Notes                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 29             | $\angle ADB = 72^\circ$ (base angles of isosceles triangle $ABD$ )<br>$\angle BAD = 180^\circ - 2 \times 72^\circ$ (angle sum of a triangle is $180^\circ$ )<br>$\angle BCA = 36^\circ$ (base angles of isosceles triangle $ABC$ )<br>$\angle BDC = 180^\circ - 72^\circ$ (angles on a straight line sum to $180^\circ$ )<br>$\angle DBC = 180^\circ - 36^\circ - 108^\circ$ (angle sum of a triangle is $180^\circ$ ) | Result shown | <p>M1 for <math>\angle ADB = 72^\circ</math> and <math>\angle BAD = 180^\circ - 2 \times 72^\circ</math></p> <p>M1 for <math>\angle BCA = "36"</math></p> <p>M1 for <math>\angle BDC = 180^\circ - 72^\circ</math></p> <p>C1 for complete chain of reasoning to find angle <math>DBC = 36^\circ</math> and one correct reason</p> <p>C1 C1 dependent on all previous marks for correct deduction and full reasons.</p> |