| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 1 |  |  | 7000 | B1 | cao |
| 2 |  |  | –5°C, –2°C, 3°C, 7°C, 10°C | B1 | correct order |
| 3 |  |  |  | M1 | oe |
|  |  |  |  | A1 |  |
| 4 |  |  | 625 | B1 | cao |
| 5 |  | 720 000 ÷ 3 | 240 000 | P1 | for division by 3 |
|  |  |  |  | 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** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 7 |  | 2 × £1.10 (= £2.20)  3 × £0.95 (= £2.85) | 3.16 | P1 | for process of working out total cost of coffees or teas or sandwiches in pence or pounds |
|  |  | 5 × £2.15 (= £10.75)  £2.20 + £2.85 + £10.75 |  | P1 | for process of finding total cost using consistent units |
|  |  | £15.80 ÷ 5 |  | P1 | for process of dividing by 5 |
|  |  |  |  | A1 | cao |
| 8 | (a) |  | Banana | B1 | cao |
|  | (b) |  | 20 | B1 | cao |
|  | (c) |  | explanation | C2 | for full explanation, eg table shows exactly ½ ; pie chart shows less than ½ as angle is less than 180o  (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° |
| 10 | (a) |  | 6.4 – 6.6 | B1 | for 6.4 – 6.6 |
|  | (b) |  | 9.8 | B1 | for 9.75 – 9.85 |
|  | (c) |  | 5, 9 | B1 | cao |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 11 | (a) |  | rule stated | C1 | for rule stated, eg number doubles |
|  | (b) |  | 32 | B1 | cao |
|  | (c) |  | 22, 29 | B1 | cao |
| 12 |  |  | 0.8 | P1 | for process to find amount of soup put in bowls, eg 24 × 0.3 or amount of soup when 8 pints are shared between 24 bowls, eg 24 ÷ 8 |
|  |  |  |  | P1 | for complete process to find amount of soup left over |
|  |  |  |  | A1 |  |
| 13 |  |  | 46 | M1 | for process to find value after 1 year |
|  |  |  |  | M1 | for process to find value after 4 years |
|  |  |  |  | A1 | cao |
| 14 |  |  | 3p | M1 | for method to find gradient of line |
|  |  |  |  | A1 | for 3p oe |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **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 |
|  |  |  |  | P1 | for process to find number of people that Ellie can make mousse for using the chocolate available |
|  |  |  |  | A1 | for correct answer with supportive working |
|  | (b) |  | correct explanation | C1 | for “can only make mousse for 6 people” oe |
| 16 |  |  | 8 | B1 | cao |
| 17 | (a) |  | 4*x* + 6*y* | M1 | for 4*x* or 6*y* |
|  |  |  |  | A1 | for 4*x* + 6*y* or 2(2*x* + 3*y*) |
|  | (b) |  | 5(2*x* – 3) | B1 | cao |
|  | (c) |  | 4 | M1 | for method to isolate terms in *p* on one side and constants on the other side |
|  |  |  |  | A1 | cao |
| 18 |  |  | 3 : 4 | M1 | for 32 – 8 (= 24) |
|  |  |  |  | M1 | (dep) for “24” : 32 |
|  |  |  |  | A1 | cao |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 19 | (a) |  | Table complete | B1 | cao |
|  | (bi) |  |  | B1 | for oe or ft from table |
|  | (bii) |  |  | B1 | for oe or ft from table |
| 20 |  |  | 1.52 | M1 | for 20 × 4.55 ÷ 60 |
|  |  |  |  | A1 | for 1.52 or 1.516(....) |
| 21 |  |  | 8 | M1 | for finding the HCF of any two of the three numbers **or** for 25 and 3 × 24 and 23 × 32 |
|  |  |  |  | A1 | cao |
| 22 |  |  | Translation by | B1 | for translation |
|  |  |  |  | B1 |  |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **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 |
|  |  |  |  | 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) |  | 13*y* − 1 | M1 | for expansion of one bracket |
|  |  |  |  | A1 | for full simplification |
|  | (b) |  | 35*u*3*w*7 | B1 | for 2 of 35, *u*3 and *w*7 correct |
|  |  |  |  | B1 | cao |
| 25 |  |  | 105 | P1 | for process to find the exterior angle or interior angle of a hexagon or octagon |
|  |  |  |  | P1 | for process to find the both exterior angles or both interior angles |
|  |  |  |  | A1 | for 105 from correct working |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 26 | (a)(i) |  | 10, 12, 14, 15, 16, 18 | B1 | cao |
|  | (ii) |  | 12, 18 | B1 | cao |
|  | (b) |  |  | M1 | for 7 or indicating correct region or for 10, 14, 16, 11, 13, 17, 19 listed |
|  |  |  |  | A1 | for oe |
| 27 |  | 6 : 5 = 12 : 10  2 : 1 = 10 : 5 | 70 | P1 | for strategy to start to solve the problem  eg 12 : 10 and 10: 5 |
|  |  | C : S : P = 12 : 10 : 5 |  | P1 | for process to solve the problem eg × 189 |
|  |  | × 189 |  | A1 | cao |
| 28 |  | × π × 4.8² | 6.58 | B1 | for use of formula for area of a circle |
|  |  | × 4.8 × 4.8 |  | P1 | for complete process to find area of shaded region |
|  |  | × π × 4.8² − × 4.8 × 4.8 |  | A1 | for 6.56 – 6.58 |

| **Paper 1MA1: 2F** | | |  |  | |
| --- | --- | --- | --- | --- | --- |
| **Question** | | **Working** | **Answer** | **Notes** | |
| 29 |  | ⦟ *ADB* = 72° (base angles of isosceles triangle *ABD*) | Result shown | M1 | for ⦟ *ADB* = 72° and  ⦟ *BAD* = 180° − 2 × 72° |
|  |  | ⦟ *BAD* = 180° − 2 × 72° (angle sum of a triangle is 180°) |  | M1 | for ⦟ *BCA* = “36°” |
|  |  | ⦟ *BCA* = 36° (base angles of isosceles triangle *ABC*) |  | M1 | for ⦟ *BDC* = 180° − 72° |
|  |  | ⦟ *BDC* = 180° − 72° (angles on a straight line sum to 180°) |  | C1 | for complete chain of reasoning to find angle *DBC* = 36° and one correct reason |
|  |  | ⦟ *DBC* = 180° − 36° − 108° (angle sum of a triangle is 180°) |  | C1 | C1 dependent on all previous marks for correct deduction and full reasons. |