# STADIRA TRAINING INSTITUTE

**MARK SCHEME • Mathematics 0580/01 • Paper 1 (Core) • Mock Set 4**

Maximum mark: 80

| Question | Answer | Marks | Partial marks / guidance |
|---|---|---|---|
| 1(a) | 3272 | B1 | |
| 1(b) | 19 | B2 | M1 for 6n - 14 = 100 oe, or for<br>(100 + 14) ÷ 6 seen |
| 2(a) | correct bar: milk = 12 | B2 | M1 for 25 - 9 - 4 (=12) seen |
| 2(b) | 16 | B2 | M1 for 4/25 × 100 oe |
| 3(a) | $\frac{5}{24}$ | B2 | M1 for 21/24 - 16/24 oe seen |
| 3(b) | $\frac{3}{2}$ oe | B2 | M1 for 9/4 seen<br>M1 for 9/4 × 2/3 oe |
| 4(a) | 960 | B3 | M2 for 2 parts = 240 so 1 part = 120 oe<br>or M1 for 5 - 3 = 2 parts identified |
| 4(b) | 360 | B1 | ft 3 × their one part |
| 5(a) | $7n$ - 1 | B2 | M1 for 7n + k oe seen |
| 5(b) | $7n$ - 1 = 100 gives $n$ = 14.43...<br>which is not an integer | B1 | oe, e.g. terms are 1 less than<br>oe, e.g. terms are 1 less than<br>multiples of 7 and 101 is not one |
| 6(a) | 450 | B3 | M2 for 360 ÷ 0.8 oe<br>or M1 for 80% associated with 360 |
| 6(b) | 120 | B2 | M1 for 150 × 0.8 oe |
| 7(a) | $12x + 25 = 133$ | B2 | B1 for 12x seen in an equation |
| 7(b) | $x = 9$ | B2 | M1 for 12x = 108 oe |
| 8(a) | $2 \times 3^2 \times 5$ | B2 | B1 for a correct factor tree or for<br>2 × 3 × 3 × 5 |
| 8(b) | 360 | B2 | M1 for $2^3 \times 3^2 \times 5$ oe, or for listing multiples of both |
| 9(a) | $x = 42$ | B2 | M1 for x + 2x + 54 = 180 oe<br>M1 for 3x = 126 oe |
| 9(b) | $y = 96$ | B2 | M1 for 180 - 2 × their 42 oe |
| 10(a) | 207 | B2 | M1 for 24 × 6 + 9 × 7 oe<br>or M1 for a correct split into two<br>rectangles seen |
| 10(b) | 74 | B2 | M1 for 24 + 6 + 15 + 7 + 9 + 13 oe |
| 11(a) | 4 | B2 | M1 for 8 being 2/3 of the total, so |

| | | | |
|---|---|---|---|
| | | | of the total, so total = 12<br>M1 for 3 + 5 = 8 seen |
| **11(b)** | $\frac{2}{3}$ oe | **B2** | M1 for 1 - 1/3 oe, ft their total |
| **12(a)** | 29 | **B1** | |
| **12(b)** | 36 | **B1** | 48 - 12 |
| **12(c)** | $\frac{7}{15}$ | **B2** | M1 for 7 parcels above 30 identified |
| **13(a)** | 7 | **B2** | M1 for 112 ÷ 16 oe |
| **13(b)** | 144 | **B2** | M1 for 2(4×4) + 4(4×7) oe<br>or M1 for one correct pair of faces |
| **14(a)** | 8 | **B2** | M1 for $2^3$ seen |
| **14(b)** | 0.76 | **B2** | M1 for 0.6 or 0.16 seen |
| **15** | $x = 2$ | **M1** | for a correct method to eliminate |
| | $y = -3$ | **M1** | one variable |
| | | **A1 A1** | A1 for each of x and y |
| **16(a)** | triangle at (-1, -1), (-1, -4), (-3, -1) | **B2** | B1 for a rotation 180° about a<br>different centre |
| **16(b)** | triangle at (1, 1), (1, 7), (5, 1) | **B2** | B1 for an enlargement sf 2, wrong<br>centre |
| **16(c)** | reflection in the *y*-axis | **B2** | B1 for "reflection" with no line, or<br>for the correct line only |
| **17(a)** | $7x - 22$ | **B2** | M1 for 3x - 12 or -10 + 4x seen<br>M1 for -10 + 4x seen |
| **17(b)** | $6b(2a - 3b)$ | **B2** | B1 for 6(...) or b(12a - 18b) or<br>3b(4a - 6b) seen |
| **18(a)** | 160 | **B2** | M1 for 120 or 40 seen |
| **18(b)** | 64 | **B2** | M1 for total time 2.5 hours seen<br>M1 for their 160 ÷ their 2.5 |
| **19(a)** | 20 | **B2** | M1 for exterior angle = 180 - 162 = 18<br>M1 for 360 ÷ their 18 |
| **19(b)** | 3240 | **B2** | M1 for (their 20 - 2) × 180 oe |
| **20(a)** | $y = -3x + 7$ | **B2** | M1 for 1 = -3(2) + c oe<br>M1 for 1 = -3(2) + c oe |
| **20(b)** | (0, 7) | **B1** | ft their (a) |

*M = method mark · A = accuracy mark · B = independent mark · FT = follow through*

*This is a Stadira Training Institute practice paper. It is not a past paper and is not endorsed by Cambridge Assessment International Education. It was written by teachers with more than 15 years teaching the Cambridge IGCSE curriculum.*