STADIRA TRAINING INSTITUTE

MARK SCHEME • Mathematics 0580/03 • Paper 3 (Core) • Mock Set 3

Maximum mark: 80

Question	Answer	Marks	Partial marks / guidance
1(a)	425	B1	
1(b)	21830	B2	M1 for 236 × 92.5 oe
1(c)	9 hours 45 minutes	B2	M1 for 17 15 - 07 30 attempted
2(a)	2	B1	
2(b)	2	B2	M1 for identifying the 13th value
2(c)	1.8	B3	M2 for (0×4 + 1×6 + 2×8 + 3×5 + 4×2) ÷ 25, or M1 for the sum 45 seen
3(a)	137.64	B2	M1 for 18.6 × 7.4 oe
3(b)	52	B2	M1 for 2(18.6 + 7.4) oe
3(c)	138	B1	ft their (a) to 3 sf
4(a)	1800	B2	M1 for 7500 × 0.06 × 4 oe
4(b)	9300	B1	ft 7500 + their (a)
5(a)	25	B3	M2 for $\sqrt{24^2 + 7^2}$ oe or M1 for $24^2 + 7^2$ seen
5(b)	84	B2	M1 for 1/2 × 24 × 7 oe
6(a)	$x = 6$	B2	M1 for 9x = 54 oe
6(b)	$x = 40$	B2	M1 for x/4 = 10 oe
7(a)	2	B3	M2 for 8 × 25 000 = 200 000 cm or M1 for 8 × 25 000 seen
7(b)	60	B2	M1 for 15 km = 1 500 000 cm seen
8(a)	$\frac{6}{20}$ oe	B1	
8(b)	$\frac{15}{20}$ oe	B2	M1 for 1 - 5/20 oe
8(c)	135	B2	M1 for 300 × 9/20 oe
9(a)	3, 7, 11	B2	B1 for two correct
9(b)	199	B1	
9(c)	$4n - 1 = 90$ gives $n = 22.75$ which is not an integer	B1	oe, e.g. all terms are odd
10(a)	754	B3	M2 for $\pi \times 4^2 \times 15$ oe or M1 for $\pi \times 4^2$ seen
10(b)	377	B2	M1 for 2 × π × 4 × 15 oe
11(a)	2400	B2	M1 for 4500 ÷ 15 or 300 seen
11(b)	20	B2	M1 for 900 seen, or for 3/15 oe
12(a)	15	B3	M2 for 3680 - 3200/3200 × 100 oe or M1 for 480 seen
12(b)	2760	B2	M1 for 3680 × 0.75 oe
13(a)	1	B1	
13(b)	15	B2	M1 for 15 ÷ 1 oe
14(a)	-1 and 5	B2	B1 for one correct
14(b)	2	B1	
14(c)	(0, 3)	B1	
15(a)	40	B2	M1 for 360 ÷ 9 oe
15(b)	140	B1	ft 180 - their (a)
15(c)	15	B2	M1 for exterior angle 24 seen

16(a)	5.82×10^6	**B2**	M1 for 5 820 000 seen
16(b)	54	**B1**	
16(c)	6.7×10^{-3}	**B1**	
17(a)	m^3	**B1**	
17(b)	$20t^5$	**B2**	B1 for 20t^k or kt^5
18(a)	$20 < m \leq 40$	**B1**	
18(b)	40.4	**B4**	M1 for midpoints 10, 30, 50, 70 seen M2 for × their frequencies and adding (2020), M1 for ÷ 50

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.