

Bronze Level

Mark Scheme 5

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Bronze
Booklet	Mark Scheme 5

Time Allowed: 56 minutes

Score: /46

Percentage: /100

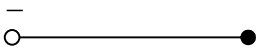
Grade Boundaries:

9	8	7	6	5	4	3	2	1
>95%	85%	75%	65%	55%	45%	35%	25%	<25%

1. (a)	45/625 x 100	7.2	2	M1 A1
1. (b)	8/100 x 45 (= 3.6) 45 + "3.6"	48.6(0)	3	M1 or M2 for 45 x 1.08 M1 dep A1
1. (c)	640 – 625 (= 15) "15" / 625 or "15" / 640	2.4	3	M1 640/625 (= 1.024) M1 625/640 (= 0.976.. or 0.977) dep "1.024" – 1 A1 (= 0.024) 1 – "0.976" (= 0.0234)
1. (d)	18 ÷ 1 1/3 or 18 ÷ 1.33 (2dp or better) or 18 ÷ 80 x 60	13.5	3	M2 M1 for 1 1/3 or 18 ÷ 1.2 (=15) or 18 ÷ 1.3 (13.8..) or 18 ÷ 80 (=0.225) A1 cao
				Total 11 marks

2. (a)		Q correct	3	B3 Bottom LH corner goes to (4, -2) If not B3 then B2 for correct size T shape in wrong position but with correct orientation If not B2 then B1 for T shape with 2 or more sides of correct length and correct orientation
2. (b)		R correct	2	B2 Bottom LH corner goes to (-11,3) If not B2 then B1 for rotation of ± 90° (wrong position)
				Total 5 marks

3. (a)		$25 < d \leq 30$	1	B1 identifies 25 → 30 class
3. (b)	$(12 \times 2.5) + (6 \times 7.5) + (4 \times 12.5) + (6 \times 17.5) + (14 \times 22.5) + (18 \times 27.5)$ (totals: 30, 45, 50, 105, 315, 495)	1040	3	M2 do not have to see intention to add If not M2 then M1 for freq x consistent interval value (890 = freq x lower limit, 1190 = freq x upper limit) or 3 or more correct products stated or evaluated A1 isw if 1040 calculated correctly and correct mean calculation follows ($1040 \div 60 = 17.3$ or better)
				Total 4 marks

4.(i)	$-2 - 2 < x$ and $x \leq 5 - 2$	$-4 < x \leq 3$	2	M1 condone omission/addition of “equals” in inequalities A1cao accept $x > -4$ and $x \leq 3$ (both present)
4. (ii)			2	B2 ft ft for an inequality where range lies between -5 and $+5$ If not B2ft then B1 ft for correct values but wrong shading of end circles
				Total 4 marks

5. (a)	$7.9 \times \cos 38^\circ$ or $7.9 \times \sin 52^\circ$	6.23	3	M2 M1 for $\cos 38^\circ$ or $\sin 52^\circ$ selected A1 6.2252.. awrt 6.23
5. (b)(i)		37.5	1	B1
(b)(ii)		38.5 or 38.49 rec	1	B1
				Total 5 marks

Q	Working	Answer	Mark	Notes
6. (a)	11.5 or 1.96 seen		2	M1 Also award for $5\frac{85}{98}$ or $\frac{575}{98}$ or answer of 5.9 or 5.87
		5.8673(46939...)		A1 for at least first 5 figures (ignore figures after the first five)
(b)		5.9	1	B1 ft from (a) if non-trivial
				Total 3 marks

7.	$\pi \times 7.6$		2	M1 or $2 \times \pi \times \frac{7.6}{2}$
		23.9		A1 for answer which rounds to 23.9
				Total 2 marks

8.	$6 \times 2 + 7 \times 4 + 8 \times 5 + 9 \times 8 + 10 \times 1$ or $12 + 28 + 40 + 72 + 10$ or 162		3	M1 for at least 3 correct products and summing them
	"162" \div 20			M1 (dep) for division by 20
		8.1		A1 Accept 8 if $162 \div 20$ seen NB: Award A0 if 8.1 clearly comes from incorrect figures
				Total 3 marks

9.	$0.2 + 0.7$		2	M1
		0.9 oe		A1 oe inc $\frac{9}{10}$, 90%
				Total 2 marks

10.	(a)	4, 8 & one even number other than 2, 6 or 10	2	B2 B1 for 4, 8 alone or for 4, 8 and one odd number or for 4, 8 and more than one other even number (any extra even numbers must not be 2 or 6 or 10) Accept 0 as an even number
	(b)	3 even numbers other than 2, 4, 6, 8 or 10 eg 12, 14, 16	1	B1
				Total 3 marks

11.		Splits shape appropriately eg rectangle + triangle or rectangle + trapezium or 'completing the rectangle'	4	B1 If lines not present on diagram then can be implied by correct method for at least two areas (areas must not overlap and must not be contradictory)
		eg. 9×10 or 90 or 9×4 or 36 or 9×6 or 54 or $\frac{1}{2} \times 7 \times 6$ or 21 or $\frac{1}{2} \times (16+9) \times 6$ or 75 16×10 or 160 or $\frac{1}{2} \times (4+10) \times 7$ or 49		M1 for area of one appropriate rectangle, triangle or trapezium
		eg. $\frac{1}{2} \times 7 \times 6 + 9 \times 10$ $\frac{1}{2} \times 7 \times 6 + 9 \times 4 + 9 \times 6$ $9 \times 4 + \frac{1}{2} \times (16+9) \times 6$ $16 \times 10 - \frac{1}{2} \times (4+10) \times 7$		M1 for complete method
			111	A1 cao
				Total 4 marks