



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

MATHEMATICS
SPECIMEN PAPER

6880/02

Paper 2

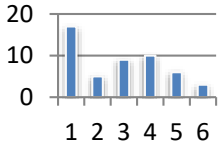
October / November 2021 - 2023

MARK SCHEME

{6880/02}

Confidential

This paper consists of **2** printed pages.

Qn. No.	Solution	Mark	Total	Comment
1	(a) -8, -13 (b) Subtract 5 (c) $17 - 5 \times 20 = -83$	B1,B1 B1 B1 B1	5	
2	(a)(i) $x^2 - 2x - 15$ (ii) $11x - 13$ (b) $\frac{-x-7}{6}$	B2 B2 B3	7	M1 for $x^2 - 5x + 3x - 15$ M1 for correct removal of brackets M2 for $\frac{2x - 4 - 3x - 3}{6}$ M1 for use of denominator 6
3	(a)(i) 17.86 (ii) $b = \frac{2A}{h} - a$ (b) $\frac{y}{3}$ (c) 0.0047256cm	B2 B2 B1 B3	8	B1 for substituting into formula correctly B1 for correctly multiplying by 2 (to get $2A = ah + bh$) B2 finding $k=10$ B1 for $0.4 = \frac{k}{5^2}$
4	(a) 113.(0954825) (b)(i) Triangular Prism (ii) net with 2 triangles and 3 rectangles	B4 B1 B2	7	B1 for $\pi \times 4 \times 5$ B1 for $\pi \times 4^2$ B1 for either 62.83 or 50.26 seen Less 1 mark for each missing face
5	(a) 17, 5, 9, 10, 6, 3 (b) 1, 3 (c) 	B3 B1, B1 B2	7	Less 1 mark for a wrong frequency Less 1 mark for each wrong bar.
6	(a) 86 km (b) 090° (c)(i) 71.8°	B2 B1 B2	8	M1 for $\sqrt{27^2 + 82^2} (=86.33)$

	(ii) 108.2° (d) 1107 km ²	B1 B2		M1 for $\tan A = \frac{82}{27}$ B1 for 0.5×27×82
7	(a) $p = \frac{1}{3}; r = \frac{3}{5}; q = \frac{2}{5}$, (b) $\frac{4}{15}$	B1 B1 B1 B2	5	B1 for $\frac{2}{3} \times \frac{2}{5}$
8	(a)(i) $\frac{7}{15} \times 6000 = 2800$ (ii) 2000 (b) 51 500 (c) 151 165	B2 B1 B2 B3	8	M1 for $\frac{7}{15} \times 6000$ M1 for $3 \times 0.08 \times 50\,000$ M2 for $120\,000 \times 1.06^3$ oe M1 for $120\,000 \times 1.06^k$ oe
9	(a) -1.33 ; -2; 1.33 (b) (c) $y = -x$	B2 B4 B1	7	Less 1 mark for each wrong. B3 for graph with all points joined but including a line joining (0.5, -4) to (0.5, 4) B2 for 9 or 10 points plotted and joined, ft their table. B1 for 7 or 8 points plotted, ft their table.
10	(a)(i) triangle with coordinates (4, 1); (6,1); and (6, 4) (ii) triangle with coordinates (-3, 0); (-3,-3); and (-1, -3) (iii) triangle with coordinates (4, 1); (6,1); and (6, -2) (b) Translation, through $\begin{pmatrix} -7 \\ 3 \end{pmatrix}$	B2 B2 B2 B1, B1	8	Less 1 mark for each wrong vertex. Less 1 mark for each wrong vertex. Less 1 mark for each wrong vertex.
11	(a) 12, 13 (b) a = 0 (c) (i) 33.85 (ii) 20 459.7 (d) $y = -8$	B1, B1 B1 B1 B2 M2A1	9	B1 for digits 204597 seen M2 for $7y = -56$ M1 for multiplying by 12
12	(a)(i) 1 km (ii) 12 minutes (iii) 8 minutes (b)(i) 3km/hr (ii) 30 km/hr (iii) 7.5km/hr (c) Straight horizontal line from 40	B1 B1 B2 B1 B2 B2 B1	11	B1 for 40 – 32 mins B1 for $4\text{km} \div (8/60)\text{hr}$ B1 for $5\text{km} \div (40/60)\text{hr}$

	to 100 mins and 5 km Line going down with gradient 30 km/hr from (100,5) to (110, 0)	B1		
--	--	----	--	--