



EXAMINATIONS COUNCIL OF ESWATINI  
Junior Certificate Examination

**CONFIDENTIAL**  
**October/November 2019**

**MARK SCHEME**  
**MATHEMATICS 309/01**  
**Paper 1**

**MAXIMUM MARK 100**

Section A

Question	Answers	Marks
1	<p>a) 2 tens</p> <p>(b) <math>\frac{400}{5 \times 1000} \times 100\%</math> oe 8 (%)</p> <p>(c) <math>\frac{10100}{5}</math> oe 2020</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>[5]</p>
2	$p = \frac{7 \times 28}{4}$ <p>49</p>	<p>1</p> <p>1</p> <p>[2]</p>
3	<p>(a) <math>\frac{9x - 12 - 2x}{6}</math> oe</p> $\frac{7x - 12}{6}$ <p>(b) <math>\frac{5y^3}{6} \times \frac{3}{10y}</math></p> $\frac{y^2}{4}$	<p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>[5]</p>
4	Correct shading (R ∩ D)'	<p>2</p> <p>[2]</p>
5	<p>(a) <math>\frac{12}{20} \times 360^\circ</math></p> <p>216°</p> <p>(b)(i) <math>\frac{8}{20}</math> oe</p> <p>(b)(ii) <math>\frac{5}{20}</math> oe</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>[4]</p>
6	53, 59	<p>2</p> <p>[2]</p>

Question	Answers	Marks
7	(a) (i) $\hat{BAE}$ and $\hat{DCE}$ (ii) $\hat{ABC}$ and $\hat{BCD}$  (b) $\hat{ABC} = 68$ $\hat{DCE} = 38$ $\hat{ACB} = 74$	1 1  1 1 1  [5]
8	(a) $2(2x) + 3x = 42\ 000$  (b) $7x = 42\ 000$ $(x) = 6\ 000$	2  1 1  [4]
9	(a) $2 \times 10^3$ (b) 1 643.7 (c) 1 650	2 1 2  [5]
10	$\frac{60}{240} \times 100\%$  25(%)	1  1  [2]
11	11 10 – 09 45 oe 1 hour 25 min	1 1  [2]
12	$-7 = 3p + 2$ $p = -3$ $q = 5$	1 1 1  [3]
13	(a) Correct diagram  (b) (i) 240 to 248 (ii) $240^\circ$	1 (correct angles) 1 (correct north lines) 1 (correct distances) 2 1  [6]

Question	Answers	Marks
14	3	1
15	(a) $3.14(10)^2(4)$ 1 256	1
		1
	(b) $3.14(20)(4)$ 251.2	1
		1
		[4]
		[52]

**Section B**

Question	Answers	Marks	Comments
16	B	B3	
17	C	B3	
18	B	B3	
19	D	B3	
20	B	B3	
21	A	B3	
22	C	B3	
23	B	B3	
24	B	B3	
25	B	B3	
26	C	B3	
27	C	B3	
28	D	B3	
29	D	B3	
30	B	B3	
31	C	B3	
		[48]	