EXAMINATION COUNCIL OF ESWATINI
Junior Certificate

Mathematics **309/01**

PAPER 1 **2020**

Confidential

MARK SCHEME

{309/01}

MARKS: 100

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QUESTION	ANSWERS	MARKS	COMMENTS
1 (a)	0.112 oe	B1	
(b)	8.286	B2	B1 for 8.2857(a.r.t)
		[3]	
2	6 (hrs) 50 (minutes)	B2	M1 for 29 20 – 22 30 oe
		[2]	
3 (a)	800	B2	M1 for $\frac{2}{5}\times 2000$ oe
(b)	8%	B2	M1 for $\frac{20}{250}\times 100$ oe
		[4]	
4 (a)	$\frac{2}{75}$	B2	B1 for $\frac{8}{300}$ soi
(b)	36	B2	B1 for correct factors of 72 & 108
		[4]	
5	– 16	B2	B1 for $-(-2)^2(4)$ soi
		[2]	
6	10	B1	
	75°	B1	
	9 , 135 °	B1, B1	
		[4]	
7	$a = 80$	B1	
	$b = 20$	B1	
	$c = 20$	B1	
	$d = 140$	B1	
		[4]	
8	$\frac{9}{16}$	B2	M1 for $9\times\frac{1}{4^2}$ soi
		[2]	
9 (a)	$-11 + 20y$	B2	M1 for $-3 - 8 + 20y$
(b)	$1\frac{1}{2}$ oe	B3	M2 for $\frac{18t}{12t}$ soi
			M1 for $\frac{2t}{3}\times\frac{9}{4t}$
		[5]	
10(a)	375	B2	M1 for $5\times 5\times 15$ soi
(b)	350	B2	M1 for $25+25+4(75)$ oe
		[4]	
11 (a)(i)	306	B2	B1 for 360 – 54
(ii)	036	B2	B1 for 180 – 144
(b)(i)	12	B2	M1 for $\sqrt{(13^2-5^2)}$
(ii)	$\frac{5}{13}$	B1	
		[7]	
12	$(x) = 2$	B2	M1 for $4x = 8$ oe
		[2]	

13	$\frac{5y-23}{12}$	B3 **[3]**	M2 for $\frac{8y-20-3y-3}{12}$ M1 for $\frac{4(2y-5)-3(y+1)}{12}$
14	$y = 2x - 1$	B3 **[3]**	M2 for $m = 2$ and $c = -1$ M1 for either $m = 2$ or $c = -1$
15	22.57	B3 **[3]**	M2 for $0.4 + 2(10) + 2(0.3) + \frac{180}{360}(3.14)(1)$ M1 for $\frac{180}{360}(3.14)(1)$
16	C	B3	
17	B	B3	
18	D	B3	
19	D	B3	
20	A	B3	
21	C	B3	
22	B	B3	
23	C	B3	
24	B	B3	
25	C	B3	
26	D	B3	
27	A	B3	
28	B	B3	
29	D	B3	
30	B	B3	
31	C	B3	