


FORM ONE TERM ONE EXAMS

**MATHEMATICS
MARKING SCHEME**

No.	WORKING	AWARD	EXPLANATION
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1.	Twenty seven million seven hundred and seven thousand eight hundred and seven	B1 B1	
		O2	
2.	a) $2/4=3/6$ b) $2/5<3/4$	B1 B1	
		O2	
3.	a) ones b) hundredths c) tenths	B1 B1 B1	
		O3	
4.	$256=2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2=2^8$	O4	
5.	$\frac{7}{8} \cdot \frac{5}{2} / \frac{4}{5} / \frac{4}{5}$ $(\frac{7}{8} \times \frac{2}{5}) + (\frac{7}{4} \times \frac{4}{5})$ $\frac{7}{20} + \frac{7}{5}$ $\frac{7}{4}$ or $1\frac{3}{4}$	M1 M1 A1	Removing bracket Division
		O3	
6.	$\frac{3}{4} = \frac{207}{4}$ km, $\frac{69}{4}$ litres $\frac{69}{8} = \frac{2078}{4}$ 1 litre=? $\frac{207 \times 8}{4 \times 69}$ = =6 km/lit	M1 M1 M1 A1	
		O4	
7.	a) $-2 > -3$ b) $-3 < 4$ c) $5 > -5$	B1 B1 B1	
		O3	
8.	$24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$ $15 = 3 \times 5$ $16 = 2 \times 2 \times 2 \times 2 = 2^4$ LCM = $2^4 \times 3 \times 5$ = $16 \times 3 \times 5$ = 240	M1 M1 M1 A1	
		O4	
9.	a) 7, 2 b) 2, 3	B1 B1	
		O2	
10.	$\frac{3}{4} \times 100$ a)	M1	

	b) =25%	A1 M1 A1	
		04	
11.	$60=2^2 \times 3 \times 5$ $80=2^4 \times 5$ $120=2^3 \times 3 \times 5$ $GCD=2^2 \times 5$ $=4 \times 5$	M1 M1	
	+		
	=20	A1	
		03	
12.	K=6 Total parts=20 Fraction= $\frac{6}{20}$ $\frac{3}{10}$	M1 M1 A1	
		03	
13.	5005005005	B2 B1 B0	All positions correct 6-9 positions correct Less than 6 positions
		02	
14.	Let one be n , 1 st $=n$, 2 nd = $n+1$ $n+(n+2)=74$ $2n=72$ $N=36$ Nos, 36 & 38	M1 M1 M1 A1	Both correct
		04	
15.	$1^3 \quad 7$ $=$ $4 \quad 4$ $2^6 \quad 20$ $=$ $7 \quad 7$	M1A1 M1 A1	
		04	
16.	a)  -10 -7	B1	

	b) $\begin{array}{ccc} -3 & 0 & +1 \end{array}$	B1	
	c) 	B1	
		O3	
17	<p>a) Let tens digit be x</p> $\frac{x}{9} + \frac{5x}{4} = 9$ $\frac{x}{4} = 9$ $X=4$ <p>Ones = $5/4 \times 4 = 5$</p> <p>No = 45</p> <p>b) +ve diff = $5 - 4$</p> <p>Max quotient = $5/4$</p> <p>Product = $1 \times 5/4$</p> <p>= $5/4$ or $11/4$</p>	M1 M1 M1 M1 M1 A1 M1 M1 M1 A1	
		10	
18.	<p>a) LCM = $2^3 \times 3 \times 5$</p> $= 8 \times 3 \times 5$ $= 100 \text{ min}$ $= 1 \text{ hr } 40 \text{ mins}$ <p>Time = 9:15 + 1 hr 40 min</p>	M1 M1 M1 M1 M1	
	$= 10:55 \text{ am}$ <p>b) LCM = $2^3 \times 3 \times 5 = 100$</p> $= 1 \text{ hr } 40 \text{ mins}$ <p>5th time = 100×4</p> $= 400 \text{ mins}$ $= 8 \text{ hrs } 40 \text{ mins}$ $= 9:15 + 8 \text{ hrs } 40 \text{ mins}$ $= 5:55 \text{ pm}$	A1 M1 M1 M1 A1	
		10	
19.	a)i) 70.864		

	70	B2	
	ii)708.63		
	700 iii)70863	B2	
	70,000		
	iv)708.63	B2	
	700		
	b)2997	B2	
	900	B2	
		10	
20.	a)Common diff=1	M1	
	LCM $8=2^3$		
	$9=3^2$		
	$6=2 \times 3$	M1	
	LCM= $2^3 \times 3^2$		
	$=8 \times 9$	M1	
	$=72$		
	No. $=72+1$	M1	
	$=73$	M1	
	SUM= $7+3$	M1	
	$=10$	A1	
	b)LCM=24		
	GCD=4		
	No.=LCMXGCD/Product	M1	
	$=24 \times 4 / 8 \times 12$	M1	
	$=1$	A1	
		10	
21.	a) divisible by both 2&3	B1	
	hence divisible by 6	B1	
	b)not divisible by 2	B1	
	hence not divisible by 6	B1	
	c)divisible by both 2&3	B1	
	hence divisible by 6	B1	
	d)not divisible by 3 hence	B1	
	not divisible by6	B1	
	e)divisible by 2&3 hence	B1	
	divisible by 6	B1	

		10	
22.	a) $196=2^2 \times 7^2$	B2	
	b) $72=2^3 \times 3^2$	B2	
	c) $385=5 \times 7 \times 11$	B2	
	d) $300=2^2 \times 3 \times 5^2$	B2	
	e) $715=5 \times 11 \times 13$	B2	
		10	
23.	a) youngest $\left(\frac{1}{12} + \frac{1}{9}\right)$ +second=(M1	
	$\frac{7}{36} =$	M1	
	$\frac{7}{36}$ Eldest=1-	M1M1	
	$\frac{29}{36} =$	A1	
	b) eldest= $\frac{29}{36}$	M1	
	if $\frac{29}{36} = \frac{330}{36}$	M1	
	$\therefore \frac{36}{36} = ?$	M1	
	$\frac{330 \times 36}{29}$	M1	
	409 655	A1	
		10	

24.	a) 370 0 b) 2499 2500 c) 38679 40,000 d) 473678 473,000 e) 501 1000		