




No.	GRADE 8 MARKING SCHEME	
	<b>WORKING</b>	<b>AWARD</b>
1.	Twenty seven million seven hundred and seven thousand eight hundred and seven	B1 B1
		02
2.	a) $2/4=3/6$ b) $2/5<3/4$	B1 B1
		02
3.	a)ones b)hundredths c)tenths	B1 B1 B1
		03
4.	$256=2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2=2^8$	04
5.	$7/8 \div \frac{5}{2} + 7/4 \div 5/4$ $(7/8 \times 2/5) + (7/4 \times 4/5)$ $7/20 + 7/5$ $7/4$ or $1\frac{3}{4}$	M1 M1 A1
		03
6.	$51\frac{3}{4} = \frac{207}{4}$ km, $\frac{69}{8}$ litres  $\frac{69}{8} = \frac{207}{4}$ 1litre=?  $\frac{207 \times 8}{4 \times 69} =$ $=6$ km/lit	M1 M1 M1 A1
		04
7.	a) $-2 > -3$ b) $-3 < 4$ c) $5 > -5$	B1 B1 B1
		03
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
		04
9.	a) 7, 2 b) 2, 3	B1 B1
		02
10.	a) $\frac{3}{4} \times 100$ $=75\%$  b) $\frac{1}{4} \times 100$ $=25\%$	M1 A1 M1 A1

		<b>04</b>
<b>11.</b>	$60=2^2 \times 3 \times 5$ $80=2^4 \times 5$ $120=2^3 \times 3 \times 5$ $GCD=2^2 \times 5$ $=4 \times 5$ $=20$	<b>M1</b>  <b>M1</b>  <b>A1</b>
		<b>03</b>
<b>12.</b>	<b>K=6</b> Total parts=20 Fraction= $\frac{6}{20}$ $\frac{3}{10}$	<b>M1</b>  <b>M1</b> <b>A1</b>
		<b>03</b>
<b>13.</b>	5005005005	<b>B2</b> <b>B1</b> <b>B0</b>
		<b>02</b>
<b>14.</b>	Let one be n, $1^{st} = n, 2^{nd} = n+1$ $n+(n+2)=74$ $2n=72$ $N=36$ Nos, 36 & 38	<b>M1</b> <b>M1</b>  <b>M1</b>  <b>A1</b>
		<b>04</b>
<b>15.</b>	$1\frac{3}{4} = \frac{7}{4}$  $2\frac{6}{7} = \frac{20}{7}$	<b>M1A1</b>  <b>M1</b> <b>A1</b>
		<b>04</b>
<b>16.</b>	a)  b)  c) 	<b>B1</b>  <b>B1</b>  <b>B1</b>
		<b>03</b>
<b>17</b>	a) Let tens digit be x $x + \frac{5}{4}x = 9$ $\frac{9}{4}x = 9$ $X = 4$ Ones = $5/4 \times 4 = 5$ No = 45	<b>M1</b> <b>M1</b> <b>M1</b> <b>M1</b> <b>M1</b> <b>A1</b>

	<p>b) +ve diff=5-4 Max quotient=5/4</p> <p>Product =1x5/4</p> <p>=5/4 or 11/4</p>	<p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p>
		10
18.	<p>a) LCM=2<sup>3</sup>x3x5 =8x3x5 =100 min =1hr 40mins Time =9:15+1hr 40min =10:55 am</p> <p>b)LCM =2<sup>3</sup>x3x5=100 =1hr40mins 5<sup>th</sup> time=100x4 =400mins =8hrs40mins =9:15+8hrs40mins =5:55pm</p>	<p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p>
		10
19.	<p>a)i) 70.864 70</p> <p>ii)708.63 700</p> <p>iii)70863 70,000</p> <p>iv)708.63 700</p> <p>b)2997 900</p>	<p>B2</p> <p>B2</p> <p>B2</p> <p>B2</p> <p>B2</p> <p>B2</p>
		10
20.	<p>a)Common diff=1 LCM 8=2<sup>3</sup> 9=3<sup>2</sup> 6=2X3 LCM=2<sup>3</sup>X3<sup>2</sup> =8X9 =72 No. =72+1 =73 SUM=7+3 =10</p> <p>b)LCM=24 GCD=4</p>	<p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p>

	$\text{No.} = \frac{\text{LCM} \times \text{GCD}}{\text{Product}}$ $= \frac{24 \times 4}{8 \times 12}$ $= 1$	<b>M1</b> <b>M1</b> <b>A1</b>
		<b>10</b>
<b>21.</b>	<p>a) divisible by both 2&amp;3 hence divisible by 6</p> <p>b) not divisible by 2 hence not divisible by 6</p> <p>c) divisible by both 2&amp;3 hence divisible by 6</p> <p>d) not divisible by 3 hence not divisible by 6</p> <p>e) divisible by 2&amp;3 hence divisible by 6</p>	<b>B1</b> <b>B1</b>  <b>B1</b> <b>B1</b>  <b>B1</b> <b>B1</b>  <b>B1</b> <b>B1</b>
		<b>10</b>
<b>22.</b>	<p>a) <math>196 = 2^2 \times 7^2</math></p> <p>b) <math>72 = 2^3 \times 3^2</math></p> <p>c) <math>385 = 5 \times 7 \times 11</math></p> <p>d) <math>300 = 2^2 \times 3 \times 5^2</math></p> <p>e) <math>715 = 5 \times 11 \times 13</math></p>	<b>B2</b>  <b>B2</b>  <b>B2</b>  <b>B2</b>
		<b>10</b>
<b>23.</b>	<p>a) youngest + second = <math>(\frac{1}{12} + \frac{1}{9})</math></p> $= \frac{7}{36}$ <p>Eldest = <math>1 - \frac{7}{36}</math></p> $= \frac{29}{36}$ <p>b) eldest = <math>\frac{29}{36}</math></p> <p>if <math>\frac{29}{36} \equiv 330</math></p> $\therefore \frac{36}{36} \equiv ?$ $= \frac{330 \times 36}{29}$ $= 409.655$	<b>M1</b>  <b>M1</b>  <b>M1M1</b>  <b>A1</b>  <b>M1</b>  <b>M1</b>  <b>M1</b>  <b>M1</b>

		<b>10</b>
<b>24.</b>	a) 370 0  b) 2499 2500  c) 38679 40,000  d) 473678 473,000  e) 501 1000	

GRADE 8 MARKING SCHEME  
2024  
MATHEMATICS

