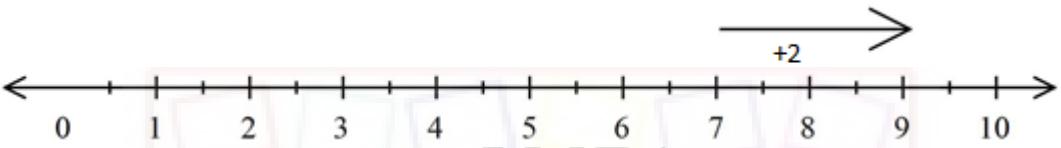
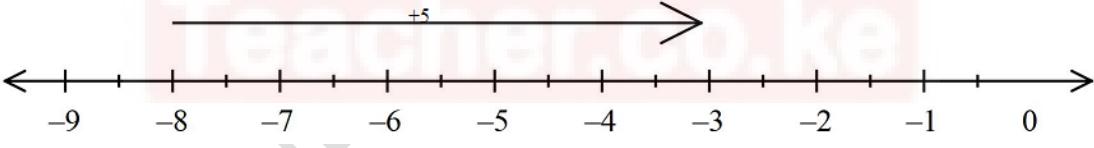
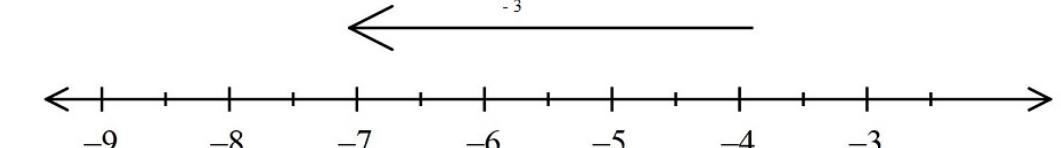


FORM ONE MARKING SCHEME

No	Working	Marks																												
1	(a) Numbers in words i. Three thousand, three hundred and nine ii. Five million, four hundred and fifty one thousand, two hundred and seventeen. iii. One billion, seventeen million, two hundred and twenty five thousand, three hundred and forty six. (b) Numbers in numerical i. 15 105 ii. 3 027 999 iii. 605 056	1 1 1 1 1 1																												
2	i. 86 098, 112 742, 230 560 ii. $500000 - (86098 + 112742 + 230560) = 70600$ iii. $6 \times 1000 = 6000$	B1 M1A1 B1																												
3	To the nearest tens 7250 To the nearest hundredth 7247.63	2 2																												
4	a) $2^3 \times 3 \times 5 \times 11$ b) $3 \times 5^2 \times 7 \times 13$ c) $3^2 \times 7^2$	2 Evidence of factorization 2 2																												
5	i. $(317 + 1048 + 72) - 342 = 1095$ ii. $\frac{2754}{34} = 81$	M1A1 M1A1																												
6	$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$ pairing = $2 \times 2 \times 3 = 12$	M1 M1 A1																												
7	i. <u>100</u> , <u>204</u> , <u>1664</u> , <u>186799</u> , <u>32</u> (4) ii. <u>2</u> , <u>15</u> , <u>16</u> , <u>1771</u> , <u>108</u> , <u>1802</u> (2)	2 2																												
8	(i) LCM of 75, 90 and 120 <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>2</td><td>75</td><td>90</td><td>120</td></tr> <tr><td>2</td><td>75</td><td>45</td><td>60</td></tr> <tr><td>2</td><td>75</td><td>45</td><td>30</td></tr> <tr><td>3</td><td>25</td><td>15</td><td>15</td></tr> <tr><td>3</td><td>25</td><td>5</td><td>5</td></tr> <tr><td>5</td><td>5</td><td>1</td><td>1</td></tr> <tr><td>5</td><td>1</td><td>1</td><td>1</td></tr> </table> $2^3 \times 3^2 \times 5^2 = 1800$ (ii) GCD of 327, 435 and 543 $2^2 \times 3^3 = 108$	2	75	90	120	2	75	45	60	2	75	45	30	3	25	15	15	3	25	5	5	5	5	1	1	5	1	1	1	M1 M1 A1 M1 - table M1A1
2	75	90	120																											
2	75	45	60																											
2	75	45	30																											
3	25	15	15																											
3	25	5	5																											
5	5	1	1																											
5	1	1	1																											
9	Lcm of 2 and 3 is 6 $\frac{21x - 10y}{6}$	M1 M1 A1																												

10	a) 2.9531 b) 87.27×10^2 2.9542×10 $= 29.542$ c) 7.982×10^{-4} 2.8253×10^{-2} $= 0.028253$	1 1 1 1 1 1 1
11	Sketch of triangle $\frac{1}{2} \times 16 \times 14 = 112 \text{ cm}^2$	B1 M1 A1
12	$r = 0.024$ $100r = 2.4$ $1000r = 24$ $r = \frac{22}{900} = \frac{11}{450}$	M1 M1 A1
13	(a)  (b)  (c) 	1 1 2
14	$43.4^2 = (4.34 \times 10)^2 = 18.836 \times 100 = 1883.6$ $434^2 = (4.34 \times 10^2)^2 = 18.836 \times 10^4 = 188\ 360$ $4.34^2 = 18.836$	B1 M1 A1 B1
15	$0.624 + 1.6721 = 2.2961$ $1.6214 - 0.7248 = 0.8966$ 0.02, 0.07, 0.1, 0.6, 1.7 $\frac{2}{100}, \frac{7}{100}, \frac{2}{10}, \frac{6}{10}, \frac{17}{10}$	B2 B2 B3

	7.21×10^{-1} 4.356×10^3	B1 B2
16	<p>(a) (i) GCD of 540 and 420 = 60 Length of the largest tile = 60 cm</p> <p>(ii) No of tiles used = $\frac{\text{Area of floor}}{\text{Area of tile}}$</p> $= \frac{540 \times 420}{60 \times 60}$ $= 63 \text{ tiles}$ <p>(b) (i) Temperature difference = $25^\circ\text{C} - (-6^\circ\text{C})$</p> $= 25 + 6$ $= 31^\circ\text{C}$ <p>(ii) $N \Rightarrow -4 + 108 - 24 = 80$</p> $D \Rightarrow 48 \div 6 = 8$ $= 8 \times 2 = 16$ $\frac{N}{D} \Rightarrow \frac{80}{16} = 5$	B1 B1 M1 M1 A1 M1 A1 M1 M1 M1 A1
17	<p>(a) $N \Rightarrow \left(\frac{7}{2} \times \frac{5}{2}\right) + \frac{1}{3} = \frac{109}{12}$</p> $\frac{109}{12} \div \frac{1}{2} = \frac{109}{6} = 18 \frac{1}{6}$ <p>(b) Let total fruits be x</p> <p>Monday = $\frac{2}{3}x$</p> <p>Tuesday = $\frac{3}{4}$ of $\frac{1}{3}x = \frac{1}{4}x$</p> <p>Wednesday $\Rightarrow 60 = x - \left(\frac{2}{3}x + \frac{1}{4}x\right)$</p> $60 = x - \frac{11}{12}x$ $x = 60 \times 12 = 720 \text{ fruits}$ <p>(c) $x - \frac{3}{5}x = 96$</p> $x = \frac{5 \times 96}{2} = 240 \text{ students}$	M1 M1 A1 M1 M1 M1 A1 M1 M1 A1

18	(a) $8x + 40y - 6x - 3y$ $8x - 6x + 40 - 3y$ $= 2x + 37y$ (b) $\frac{5(x - 3) + 4(2x - 3)}{20}$ $\frac{5x - 15 + 8x - 12}{20}$ $\frac{13x - 27}{20}$ (c) $b(a + c) + m(a + c) = (b + m)(a + c)$ (d) $m(a + b) + n(a + b) = (m + n)(a + b)$	M1 M1 A1 M1 M1 A1 M1 A1 M1 A1
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