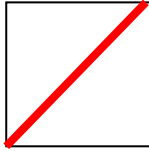


FFX 4-5 Maths Revision Answers				
A	Numbers & the number system	Answer	Mark	Criteria
1(a)	To decrease 60 by 32%	<b>60 x 0.68</b>	1	1
1(b)	Choose a different calculation Write a question	<ul style="list-style-type: none"> <li>60 x 0.32 (What is 32% of 60 OR What is 60 decreased by 68%?)</li> <li>60 x 1.32 (What is 60 increased by 32%?)</li> </ul>	1 Any one	1
B	Calculating		Mark	Criteria
2	Multiplier for 12% decrease	625 x <b>0.88</b> = 550	1	2
3	Multiply the fractions	$1\frac{2}{5} \times \frac{2}{3}$ $\frac{7}{5} \times \frac{2}{3}$ $\frac{14}{15}$	1	3
	Divide the fractions	$1\frac{2}{5} \div \frac{2}{3}$ $\frac{7}{5} \times \frac{3}{2}$ $\frac{21}{10}$ $2\frac{1}{10}$	1	
4	Estimate $\frac{41.4 \times 18.21}{0.18}$	$\frac{40 \times 20}{0.2} = \frac{800}{0.2} = \frac{8000}{2} = \mathbf{4000}$	1	4
5	Work out: $\frac{34.2 \times 6.08}{2.45 \times 13.4}$	<b>6.333719159</b>	1	5
C	Algebra		Mark	Criteria
6	Expand $(x - 4)^2$	$(x - 4)(x - 4)$ $x^2 - 4x - 4x + 16$ $= \mathbf{x^2 - 8x + 16}$	1 1	6
7	Solve: $5x + 6y = 9$ $x - 2y = 5$ (x3)	$5x + 6y = 9$ $3x - 6y = 15$ Add: $8x = 24$ $\mathbf{x = 3}$ Substitute: $15 + 6y = 9$ $\mathbf{y = -1}$	1 1	7
8	Solve $4x + 2 \leq 2(x + 3)$	$4x + 2 \leq 2x + 6$ $2x + 2 \leq 6$ $2x \leq 4$ $\mathbf{x \leq 2}$	1 1	8
	Represent on number line			
9	Make q the subject of the formula $P = 2q + 10$	$P = 2q + 10$ $2q + 10 = P$ (-10 from each side) $2q = P - 10$ ( $\div 2$ ) $\mathbf{q = \frac{P - 10}{2}}$	1	9

10	<b>6, 9, 14, 21, 30, ...</b> Find nth term	1 <sup>st</sup> difference : 3, 5, 7, 9 2 <sup>nd</sup> difference: 2 $n^2$ : 1, 4, 9, 16, 25 Then (+5) from $n^2$ gives <b>6, 9, 14, 21, 30</b> , So nth term $T(n) = \underline{n^2 + 5}$	2	10
11	Table of values for: $y = X^3 + x$  Graph	<b>0</b> <b>10</b>  <b>Smooth 'S' shape curve</b> <b>passing through -1 and 0 on x-axis</b>	1  1 1	11
<b>D</b>	<b>Shape, Space and Measure</b>		<b>Mark</b>	<b>Criteria</b>
12	Use Pythagoras to find height of the triangle	$8^2 - 3^2$ $= 64 - 9$ $= 55$ $\sqrt{55} = \underline{7.4m}$	1  1	12
13	Find total surface area of triangular prism	Front/back = $2(4 \times 3 \div 2) = 12cm^2$ 3 Rectangles = $(7 \times 5) + (4 \times 7) + (3 \times 7) = 84cm^2$ TSA = $\underline{12cm^2 + 84cm^2 = 96cm^2}$	1 1	13
14	3 missing values from 1.5 enlargement	<b>4cm</b> <b>40°</b> <b>12cm</b>	3	14
15	Locus equidistant from AD and CD		1	15
16	a) minimum b) maximum	<b>5.5 m</b> <b>6.5 m</b>	1 1	16
17	Work out density of cheese	Density = Mass ÷ volume $= 480g \div 400cm^3$ $= 1.2 g/cm^3$	1	17
<b>E</b>	<b>Data Handling</b>		<b>Mark</b>	<b>Criteria</b>
18	Criticise questionnaire a) ask series of questions b) Better way to select c) Ensure reliable response	Restricted to one group of pupils(biased) -small sample  Take a random sample from a range of classes  Response boxes	1  1 1	18
19	True or false statements	True – Canada range = 30; Europe range = 40 True False – Some >30 recorded in European cities	1 1 1	19

