FFX 5-	6 Maths Revision Answers			
Α	Numbers & the number system	Answer	Mark	Criteria
1(a)	$\frac{1}{15}$ as decimal	1÷15 = 0.06	1	1
1(b)	0.46666666 as fraction	Let x = 0.4666666666 10x = 4.666666666		1
		100x = 46.66666666 90x = 46	1	
		x = <u>42</u> = <u>7</u> 90 15		
В	Calculating		Mark	Criteria
2(a)	Height of 256m decreased by 25% after 5 bounces	256 x 0.75 ⁵ = 60.75m	1	2
2(b)	Increased by 20% to £264 Find original	£264 ÷ 1.20 = £220	1	
3(a)	a)(i) 0.00000561 in standard form	5.61 x 10 ⁻⁶	1	3
	(ii) 9.3 x 10 ⁷ as ordinary number	93000000	1	
	b) (8 x 10) ⁻⁵ x (3 x 10 ⁷	=24 x 10 ² 2.4 x 10 ³	1	
С	Algebra		Mark	Criteria
4(a)	Factorise 2x ² + 7x + 5	(2x + 5)(x + 1)	1	4
4(b)	Factorise $x^2 - 169$ Expand: $(3x - 5)^2$	(x + 13)(x - 13)	1	
5(a)	Expand: (3x - 5) ²	$(3x - 5)(3x - 5)$ $9x^{2} - 15x - 15x + 25$ $9x^{2} - 30x + 25$	1	5
5(b)	Expand: (a- b) ²	(a - b)(a - b) a ² - 2ab + b ²	1	
5(c)	Solve <u>5(3y – 4)</u> = 7 2y	$\frac{5(3y-4)}{2y} = 7$ $2y$ $15y-20 = 14y$ $y-20 = 0$ $y = 20$	2	
6	Make 'x' the subject of: px + a = qx + b	px + a = qx + b $px - qx = b - a$ $x(p - q) = b - a$ $(p - q) (p - q)$ $x = b - a$ $p - q$	1	6
7	F = <u>9C</u> + 32 5 Substitute: C = -20	$F = \frac{9C + 32}{5}$ $= \frac{9 \times -20 + 32}{5}$ $= \frac{-180}{5} + 32$		7
		= - 36 + 32 = -4	1	

	T			
8	Region for: $y \le 4$; $y \ge \frac{1}{2}x + 2$; $x \ge -1$	R R 1 1 2 3 4 -1 -1 -1 -2 -2 -3 -4 -4 -3 -2 11 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	2	8
9	Match graph with equation	7	2 (-1 per	9
	·	Graph E equation $y = \frac{7}{x}$	error)	
		Graph C equation $y = \frac{1}{2} x^3$		
		Graph B equation $y = 3 - 2x$		
		Graph A equation $y = \underline{x}^2$		
10		Graph D equation $y = 5x - 3$		11210
10	Sketch graph of y= 2x ² -4			11210
		4 Ty 3 2 1 1 -4 -3 -2 -1 1 2 3 4 -1 -2 -3 -3	2	
D	Shape, Space and Measure		Mark	Criteria
11(a)	Are two triangles congruent Explain	YES SSS	1	11
11(b)	Work out length AB	s. f. = $12 \div 8.4 = 1\frac{3}{7}$ or 1.428571429	1	
	Work out length BC	AB = $5 \div 1\frac{3}{7} = 3.5$ cm BC = $8.6 \div 1\frac{3}{7} = 6.02$ cm	1	
12(a)	Calculate size of angle x using trigonometry (3sf)	$\tan x^{0} = \frac{7}{10.2}$ $x = 34.5^{0}$	2	12
12(b)	Calculate length of side AC using trigonometry (2dp)	$\cos 54^{\circ} = \underline{x}$ 11.8 $x = 11.8 \times \cos 54^{\circ} = 6.94m$	2	

13									
Sabc + 3a²b V b + 2h L	13			3xy + 5y ²	Α			2 (-1 per	13
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				5abc + 3a ² b	V			,	
				b + 2h	L				
				x(x + 2y)	Α				
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	16(a)		0.8 x 0					1	16

15(b)	Probability of choosing a	0.3 + 0.25		
	white or dark chocotate	= 0.55	1	
17(a)	Complete tree diagram	0.4 Jessica 0.4 0.7 0.6 0.4 0.4	pass fail pass	17
17(b)	Probability Lucy and Jessica pass the test	0.6 0.7 x 0.4 = 0.28	fail 1	
		0.8 x 0.6 = 0.48		