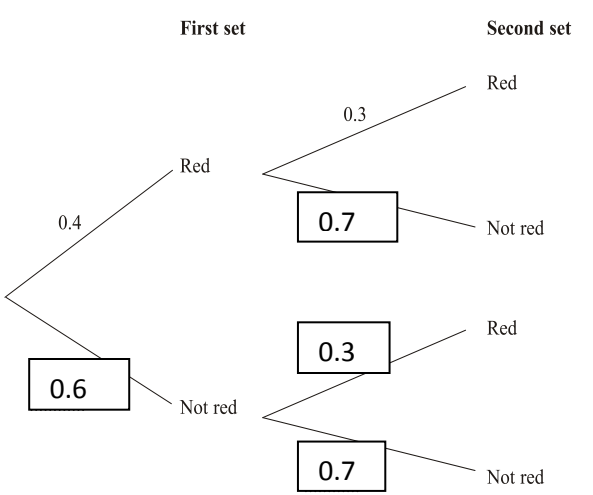


Year 7 FFX 5/6 Practice Assessment Answers			
A	Numbers & the number system	Answer	Mark
1(a)	$\frac{7}{15}$ as decimal	$7 \div 15 = \underline{0.46}$	1
1(b)	0.12121212... as fraction	Let $x = 0.1212121212\dots$ $100x = 12.1212121212\dots$ $99x = 12$ $x = \frac{12}{99} = \frac{4}{33}$	1
B	Calculating		Mark
2(a)	a)(i) 0.000043 in standard form	4.3×10^{-5}	1
	(ii) 7×10^4 as ordinary number	70000	1
2(b)	b) $3.25 \times 10^5 \times 2.4 \times 10^{-1}$	7.8×10^4	1
C	Algebra		Mark
3(a)	Factorise $x^2 - x - 12$	$(x - 4)(x + 3)$	1
3(b)	Factorise $x^2 - 49$	$(x + 7)(x - 7)$	1
4(a)	Expand: $(3x - 2)(3x - 1)$	$9x^2 - 3x - 6x + 2$ $9x^2 - 9x + 2$	1
4(b)	Expand: $(x - y)^2$	$(x - y)(x - y)$ $x^2 - 2xy + y^2$	1
5	Make 'a' the subject of: $ma^2 = F$	$ma^2 = F$ $a^2 = \frac{F}{m}$ $a = \sqrt{\frac{F}{m}}$	1
6	$S = \frac{u^2 + v^2}{2a}$ Substitute: $u = -1, v = -2, a = 2$	$S = \frac{u^2 + v^2}{2a}$ $= \frac{(-1)^2 + (-2)^2}{2 \times 2}$ $= \frac{1 + 4}{4}$ $= \frac{5}{4}$ $= 1.25$	1
	Data Handling		Mark
7	Comment on Maths and English results	English results – on average these are better - less spread of results indicated by the smaller interquartile range	1
8(a)	Probability of White OR Blue ball	$0.3 + 0.25$ 0.55	1
8(b)	Probability car fails MOT on		

	brakes & lights	$\frac{1}{5} \times \frac{1}{10}$ $= \frac{1}{50}$	1
9(a)	Complete tree diagram	<div style="display: flex; justify-content: space-around;"> First set Second set </div> 	2
9(b)	Probability both sets of lights are RED	0.4×0.3 $= 0.12$	1 1