Question			Answer	Marks	Part Marks and Guidance	
1	**(a)**		Jenny has divided by the smaller number	1	oe condone 'by smaller decimal'	see appendix for examples [Common with Foundation]
	(b)		multiplying by a number less than 1 makes the answer smaller	1	oe condone decimal or fraction instead of number less than one	[Common with Foundation]

Question			Answer	Marks	Guidance
2			81, 664 ÷ 4 (oe) =166, 196, 1200 ÷ 5 =240	5	
			As above but with no methods (for % and/or fraction	4-3	For lower mark 3 or more correct values
			2 correct values	2-1	For lower mark 1 correct value
			Nothing of any worth.	0	

3	**(a)**		$\frac{13}{20}$	3	**B2** for $1-\frac{7}{20}$, $\frac{26}{40}$ oe Or **M1** for common denominator found and at least one fraction correctly converted	Allow whether mixed number or proper fraction converted
	(b)	**(i)**	$\frac{2}{5}$	3	**M2** for attempt at $1\div\frac{5}{2}$ seen or $\frac{4}{10}$ oe or 0.4 Or **M1** for $1 \div 2.5$ seen, 2.5^{-1} seen or $\frac{5}{2}$ seen or any a/b written as b/a or a written as 1/a or a^{-1} seen	
		(ii)	0	1		

4			4700	3	**M2** for 2.35 × 2000 oe Or **M1** for 1.35 × 2000 oe soi by 2700	

5	(a)		0.089	**2**	**B1** for other rot versions of 0.08854... to 2 or more dp or **SC1** for answer 13.553 or 3.627	allow B1 for 0.089 seen in body and spoilt on answer line e.g. answer of 0.110 – bod wrong rounding
	(b)		700	**2**	**B1** for other rot versions of 718.40... to 2 or more sf	

6	**(a)**	**(i)**	148.877	1	Condone rot to at least 4 sf	
		(ii)	5.4 as final answer	2	**B1** for 5.425 or 5.42 or 5.43 Or **SC1** for 7.5	
	(b)		0.4 or $\frac{2}{5}$ as final answer	1		
	(c)		$(7 \times 2 + 6)^2 = 400$ $(6 + 4) \times 2 - 5 = 15$	1 1	For each answer, ignore superfluous extra pairs of brackets	

7	**(a)**		$\frac{3}{8}$, 40%, $\frac{5}{12}$ oe with correct method	4	**M1** for attempt at using correct method for changing a value to a different denominator, a decimal or % oe **A1** if correct $\frac{3}{8}=\frac{27}{72}=\frac{45}{120}$ =0.3[7…] or 0.38 $\frac{5}{12}=\frac{30}{72}=\frac{50}{120}$ =0.41[…] or 0.42 Or if converting to unit fractions **M1A1** for any 1 of $\frac{3}{8}=\frac{1}{2.6(..)}$, $40\%=\frac{1}{2.5}$, $\frac{5}{12}=\frac{1}{2.4}$ And **A1** for second correct conversion to same form OR If 0 scored **SC2** for reasonable attempt at drawing equivalent bars (or other diagrams) followed by correct answer Or **SC1** for correct answer with no working	soi by $\frac{48}{120}$, $\frac{40}{100}$, $\frac{2}{5}$ etc 0.38 does not alone imply correct method Condone 2.6[…], 2.5 or 2.4 for **M1** only Fourth mark dependent on **M1A2**

8	**(a)**		$\frac{4}{5}$	1		
	(b)		85	1		
	(c)		English with full correct work	3	Soi by eg 85% **B2** for <u>any</u> two correct in the same form **Or B1** for Science correct as %, frac or dec. *[One value may occur in (a) or (b)]*	[Sc] 0.77[1..] or 77[.1..]% or $\frac{648}{840}$ oe [Ma] 0.8[0] 80% or $\frac{672}{840}$ oe [En] 0.85 or 85% or $\frac{714}{840}$ oe If fractions must be same denominator

9	**(a)**	**(i)**	4.18	2	**B1** for 4.177[….] seen	
		(ii)	1.4	2	**B1** for 1.42[….] seen	
		(iii)	0.0625 final answer	1		
	(b)		UB: 6549 LB: 6450	1 1	Condone 6550 After **0** allow **SC1** for correct answers reversed	

10	(a)		0.019	2	**B1** for 0.0186... seen or rot to 2dp or more, except 0.019 **SC1** for 4.612	Allow **B1** for 0.02, whether from rounding calculated answer or from estimate
	(b)		2 × (2 + 6) × 4 = 64 (2 × 2 + 6) × 4 = 40	1 1	Allow superfluous pairs of brackets in one or both answers	

11			$a = 2$ $a = 2k$ $b = 5$ or $b = 5k$ $c = -6$ $c = -6k$	1 1 2	Any consistent k ≠ 0 **M1** for (*their b*)^2 − 4 × (*their a*) × *c* = 73 oe	Must be an equation

12	(a)		7.84	2	**M1** for 481.89... seen (eg may be under root symbol) or for 2.8 seen	
	(b)		2.31 as final answer	2	**B1** for other rot versions of 2.30596... to at least 1 dp or for figs 231 Or **SC1** for 17.54 or 223.28 or 203.18	
	(c)		0.8 or $\frac{4}{5}$	1		

13	(a)		$\frac{5}{11}$	3	**B2** for $\frac{45}{99}$ oe Or **M1** for $100x = 45.\dot{4}\dot{5}$ (min 4 figs)	
	(b)		$\frac{1}{22}$	1FT	Corre or FT *their* (a) ÷ 10 in its lowest terms	