

Question			er	Marks	Guidance
1			2, 3, 17 as final answer	2	<p>May be expressed as a product</p> <p>Allow M1 for correct division or factor tree</p> <p>Or M1 for two of 2, 3, 17 or for all 3 seen + one extra</p> <p>Condone 2 + 3 + 17 etc for 2 marks If answer line blank, allow 2 marks for correct factor tree or division with 2, 3 and 17 clearly identified eg circled</p> <p>For M1, ignore one other factor or one repeat eg M1 for 2, 3, 34 But M0 for 1, 2, 3, 3, 34</p>

2	(a)		$3x + 4y - 5$ final answer	3	<p>B2 for <u>two</u> of $3x$, $(+)$ $4y$, $- 5$ Or B1 for <u>one</u> of $3x$, $(+)$ $4y$, $- 5$</p>
	(b)		$\frac{3x}{2y}$ final answer	2	<p>B1 for $\frac{3xy}{2y^2}$ or $\frac{15x}{10y}$ or $\frac{1.5x}{y}$ seen</p>
	(c)		$2x(2x + 5y)$ final answer	2	<p>B1 for $2(2x^2 + 5xy)$ or $x(4x + 10y)$ seen Or SC1 for $4x(x + 2.5y)$ or $(2x + 0)(2x + 5y)$ seen</p>

3	(a)	$7x$ final answer	2	B1 for $\frac{7x}{1}$ or for $\frac{14x}{2}$ or $\frac{7x^2}{x}$ seen	
	(b)	$27y^2 - 18y + 20$ final answer	4	B2 for $15y^2 - 10y$ Or B1 for $15y^2$ or $-10y$ AND B1 for $12y^2 - 8y + 20$	
	(c)	$5(2x - 3)$ final answer	1		Condone omission of right-hand bracket
	(d)	± 4	3	B2 for answer (+)4 or answer -4 or for $(\pm)\sqrt{16}$ seen or for $(x - 4)(x + 4) [=0]$ Or M1 for $x^2 = 16$ Or for $x^2 - 16 [=0]$	

4	(a)		$2^2 \times 3$ oe	1	Must be product	
	(b)	(i)	48	2	B1 for answer as 24 or a multiple of 24 that is greater than 48 eg 72 or 96 Or M1 for lists of multiples of 8 and of 12 (at least 3 each)	
		(ii)	[48 or <i>their</i> (i)] + multiples of 24	2	Or go up in 24s oe B1 for multiples of 24 oe mentioned or for 'multiples of 48'	See appendix for examples

5	(a)		3	1		
	(b)		Any three of 8, $28\sqrt{3}$, $10\sqrt{3}$, $35\sqrt{9}$ $113 + 38\sqrt{3}$ isw	M2 B1	M1 for any two of these	Accept 35×3 or 105 or $35\sqrt{3^2}$ for $35\sqrt{9}$ Final mark independent of method

6	(a)		$18y + 30$ as final answer	1		
	(b)		$5(y - 3)$ as final answer	1	oe Condone omission of final bracket; allow inclusion of multiplication sign	
	(c)		$\frac{13}{2}$ as final answer	3	oe ignore subsequent conversion M2 for $2x = 13$ Or M1 for one side of this correct or for x terms or constant term collected correctly AND M1 for <i>their</i> answer correct FT (rot to at least one dp if needed), after at least M1 earned	eg M1 for $2x - 2 = 11$ eg allow final M1 for 1.08 after $12x = 13$

7	(a)	$2^2 \times 3 \times 5 \times 7$ oe	2	Must be expressed as product M1 for at least two of 2, 3, 5, 7 seen as factors isw	Do not allow 1 in the product for 2 marks e.g. may be seen in division or factor tree
	(b)	HCF = 6 LCM = 1260	1 2	M1 for any of the following seen anywhere 3 multiples of 18 and 3 multiples of 420 or 420×3 or for $2^2 \times 3^2 \times 5 \times 7$ or any multiples of 1260	e.g. HCF = 1260 scores M1