

Question		Answer	Marks	Guidance												
1	(a)	$a = 8$ $b = 3$	1 1	If 0, allow SC1 for LHS = $8x + 3$ soi 0 for 8 if it comes from eg $8x^2$												
	(b)	Any pair of values satisfying the relationship $2c + d = 19$	2	nfw M1 for $2c + d = 19$ soi or LHS = 19 eg 2 for <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td><i>c</i></td> <td>5</td> <td>6</td> <td>10</td> <td>9.5</td> <td>8</td> </tr> <tr> <td><i>d</i></td> <td>9</td> <td>7</td> <td>-1</td> <td>0</td> <td>3</td> </tr> </table>	<i>c</i>	5	6	10	9.5	8	<i>d</i>	9	7	-1	0	3
<i>c</i>	5	6	10	9.5	8											
<i>d</i>	9	7	-1	0	3											

2	(a)	$[x =] 5.5$	3	oe; nfw M2 for $2x = 11$ oe or M1 for xs or numbers collected and simplified correctly and M1FT for final answer FT <i>their</i> $ax = b$ or $ax - b = 0$ with $a \neq 1$ or 0 or b and $b \neq 0$, provided at least M1 earned SC2 for correct embedded answer	allow from trials
	(b)	$3n + 1$	2	oe; need not be simplified M1 for $3n$ oe SC1 for $3x + 1$ oe using other letters	accept $n \times 3$. $n3$ etc; [Common with Foundation]

3	(a)	5.5 or $5\frac{1}{2}$	3	nfw M2 for $2x = 11$ or $[x =] 11/2$ Or M1 for one side of this correct AND M1 for answer FT <i>their</i> $ax = b$ or <i>their</i> $ax + b = 0$ for $a \neq 1$ or 0 , $b \neq 0$	Common FT dependent on at least M1 already earned
	(b)	$7y(y - 2)$ as final answer	2	M1 for $7y(\dots)$ or for $7(y^2 - 2y)$ or for $y(7y - 14)$	

4	(a)	$a = 6$ $b = 20$	1 2	M1 for $b = 2 + 3a$ seen Or B1 for <i>their</i> answer FT $2 + 3 \times \textit{their a}$	
	(b)	$[p =] \sqrt[3]{\frac{cH^2}{10}}$ oe	4	nfw M1 for $H^2 = \frac{10p^3}{c}$ M1 for $cH^2 = 10p^3$ or FT <i>their</i> expression for H^2 M1 for $p^3 = \frac{cH^2}{10}$ or FT M1FT for cube root of <i>their</i> expression for p^3 ; cube root symbol must extend below fraction line	ie M1 for correct squaring M1 for dealing correctly with denominator of fraction after squaring M1 for dealing correctly with result to get p^3 as subject M1 for correctly finding cube root of <i>their</i> expression for p^3 (middle two M s may be earned for a combined step) Award full marks only if fully correct