

Question number	Scheme		Marks
<b>6.</b>			
<b>(a)</b>	$a = 2 \text{ , } b = 3$		B1B1 (2)
<b>(b)</b>	At intersection of the curve with the $y$ -axis , $x = 0$  $y = \frac{3 \times 0 + c}{0 + '2'} = \frac{c}{'2'} \left( = \frac{7}{2} \right) \Rightarrow c = 7$		M1A1 (2)
<b>(c)</b>	At intersection of the curve with the $x$ -axis, $y = 0$  $0 = \frac{'3'x + '7'}{x + '2'} \Rightarrow '3'x + '7' = 0 \Rightarrow x = -\frac{7}{3} \Rightarrow s = -\frac{7}{3}$		M1A1ft (2) <b>(6)</b>
<b>Notes</b>			
(a)	B1	For $a = 2$ <b>or</b> $b = 3$	
	B1	For $a = 2$ <b>and</b> $b = 3$	
(b)	M1	For using the given equation and setting $x = 0$ and $y = 3.5$ (oe) . They must achieve a value for $c$ for the award of this mark Follow through their values for $a$ and $b$ . If their $b$ is incorrect or they even use the letter $b$ allow $b \times 0 = 0$ .	
	A1	$c = 7$	
(c)	M1	Uses their values for $a$ , $b$ and $c$ and sets $y = 0$ . They must achieve a value for $x$ for the award of this mark	
	A1ft	For $s = -\frac{7}{3}$	