

Question number	Scheme	Marks
2 (i)	$\frac{a}{1} = -2$ <span style="margin-left: 150px;"><math>a = -2</math></span>	B1
(ii)	$ax + b = 0 \Rightarrow -2 \times 4 + b = 0$ <span style="margin-left: 150px;"><math>b = 8</math></span>	B1 ft
(iii)	$-3 + c = 0$ <span style="margin-left: 150px;"><math>c = 3</math></span>	B1
(iv)	So the equation of $S$ is $y = \frac{8-2x}{x+3}$ When $x = 0$ $y = \frac{8-2 \times 0}{0+3} = \frac{8}{3}$ <span style="margin-left: 150px;"><math>p = \frac{8}{3}</math></span>	B1 ft [4]
<b>Total 4 marks</b>		

		In parts (i), (ii) and (iii), values must be clearly stated or shown correctly substituted in the equation of the curve.
(ii)	B1 ft	ft (i) $b = -4 \times$ their $a$
(iv)	B1 ft	ft (ii) and (iii) $p = \frac{\text{their } b}{\text{their } c}$ Accept 2.67 or better, $\left(0, \frac{8}{3}\right)$ or $\frac{8}{3}$ marked on the diagram at the point where the curve crosses the $y$ axis.