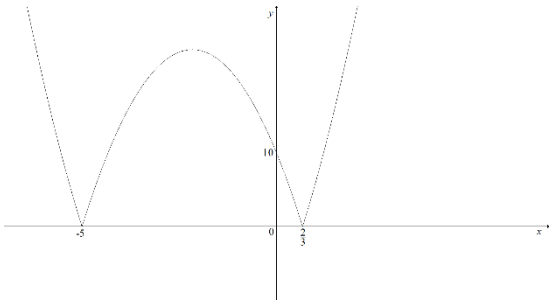
Question	Answer	Marks	Guidance
1	$a=2$	**B1**	
	$b=3$	**B1**	
	$c=-4$	**B1**	
2(a)		**4**	**B1** for a correct basic shape, allow 'construction curve' **Dep B1** for (0, 10) must have correct basic shape, must be convinced that this is the vertical intercept **B1** for (–5, 0) and $\left(\frac{2}{3},0\right)$ or (0.667, 0) or better **Dep B1** on all previous **B** marks for all correct with cusps and the correct shape for $x<-5$ and $x>\frac{2}{3}$
2(b)	Stationary point when $x=-\frac{13}{6}$ soi	**M1**	For differentiation or completing the square or use of symmetry
	$(-)\frac{289}{12}$ or $(-)24.1$ or better	**A1**	For *y*-value of stationary point, allow +ve or –ve value.
	$k>\frac{289}{12}$ or $k>24.1$ or better	**A1**	
	$k=0$	**B1**	
	Alternative		
	$3x^2+13x-(10+k)$ Using discriminant, $169+12(10+k)$	**(M1)**	Allow a sign error in $3x^2+13x-(10+k)$, but must have a term in *k* not k^2
	Critical value $(-)\frac{289}{12}$ or $(-)24.1$ or better	**(A1)**	
	$k>\frac{289}{12}$ or $k>24.1$ or better	**(A1)**	One solution only from correct work
	$k=0$	**(B1)**	