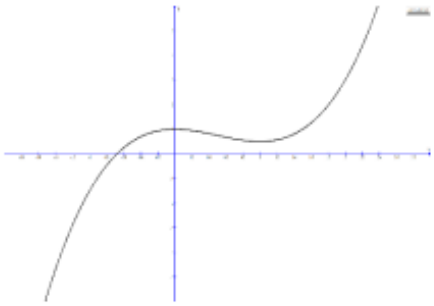
Question 12 – 2:

12(a)	$3x^2 - 2kx$	**M2**	**M1** for $3x^2$ or $-2kx$
	their $\frac{dy}{dx} = 6$	**M1**	Dep on at least M1 for derivative
	$x = 2$ substituted in *their* $\frac{dy}{dx}$	**M1**	Dep on at least M1 for derivative
	Correct working leading to 1.5 oe	**A1**	A0 if any errors in working leading to 1.5
12(b)	(0, 1) (1, 0.5)	**4**	**B3** for $x = 0$ and $x = 1$ or for (1, 0.5) OR **M1** for *their* $\frac{dy}{dx} = 0$ **B1** for $3x^2 - 3x$ oe or better
12(c)	correct sketch 	**2**	with max on positive y-axis and min in 1st quadrant **B1** for positive cubic or for graph with one max which is on pos y-axis and one min which is in 1st quadrant