

Question Number	Answer	Marks
3	$y = \frac{1}{5}(22 - 6x)$	M1
	$x^2 + \frac{x}{5}(22 - 6x) - 3x = 2$	M1
	$x^2 - 7x + 10 = 0$	A1
	$(x - 2)(x - 5) = 0$	M1
	$x = 2, \quad x = 5$	A1
	$x = 2 \Rightarrow y = 2, \quad x = 5 \Rightarrow y = -\frac{8}{5}$	A1
		[6]

Notes

M1 for re-arranging the linear equation to read $y = \dots$ or $x = \dots$. OR multiplying the quadratic by 5 so the linear can be substituted without re-arrangement

M1dep for substituting to obtain a quadratic in a single variable (either y or x)

A1 for a correct 3 term quadratic. Need not have 0 on one side.

$$x^2 - 7x + 10 = 0 \quad \text{or} \quad 5y^2 + 2y - 16 = 0 \quad \text{or any equivalent}$$

M1dep for solving their quadratic by any valid means inc calculator (see initial notes)

Dependent on both previous M marks.

A1 for any 2 correct values, can be both x , both y or a pair consisting of one of each

A1 for the other 2 correct values