

Question	Answer	Marks	Guidance
4	Substitute for y (or x) in first equation and simplify	*M1	All terms to one side and brackets expanded.
	Obtain $10x^2 + 3kx - 40 [= 0]$ (or $10y^2 + 11ky + k^2 - 360 [= 0]$)	A1	
	Attempt $b^2 - 4ac$ for 3-term quadratic involving k	DM1	Not in quadratic formula unless $b^2 - 4ac$ is isolated.
	Obtain $9k^2 + 1600$ (or $81k^2 + 14400$)	A1	
	$9k^2 + 1600 > 0$	A1 FT	FT for $ak^2 + b > 0$ with $a, b > 0$.
		5	