5	(a)	<i>k</i> = 3	B1 [1]	1.1			
5	(b)	$(1-4)^2 + (2-k)^2 = 13$		M1	1.1 a	oe e.g. allow consistent use of square roots – must be using subtraction in brackets	May be implied by one correct value for k
		$\begin{array}{l} k=0\\ k=4 \end{array}$		A1 A1	1.1 1.1		
				[3]			
5	(c)	$\frac{4-2}{7-1} = \frac{k-5}{4-3}$ oe	or $\frac{5-2}{3-1} = \frac{4-k}{7-4}$ oe	M1	3.1a	or $\frac{5-4}{3-7} = \frac{k-2}{4-1}$ oe – must be consistent application of gradients (allow one sign error)	Any one of these three solutions
		$k = \frac{16}{3}$	$k = -\frac{1}{2}$	A1	1.1	$k = \frac{5}{4}$	
			[2]				