Question Number	Scheme	Marks
1(a)(i)	$(2, 12)$	B1
(ii)	$(2, 15)$	B1
		(2)
(b)	$k \text{ ,, } 3, \quad k = 5$	M1 A1
		(2)
(c)	$(x =) -5$	B1
		(1)
		(5 marks)

Notes

Check for answers given in the body of the question. (There are lots!)

In the absence of any labelling for (a)(i) and (ii) the first answer is to be taken as (i)

(a)(i)

B1: $(2, 12)$ but allow coordinates given separately e.g. $x = 2$, $y = 12$

Condone missing brackets e.g. 2, 12 and condone $\begin{pmatrix} 2 \\ 12 \end{pmatrix}$

(a)(ii)

B1: $(2, 15)$ but allow coordinates given separately e.g. $x = 2$, $y = 15$

Condone missing brackets e.g. 2, 15 and condone $\begin{pmatrix} 2 \\ 15 \end{pmatrix}$

(b)

M1: One of $k \text{ ,, } 3, \quad k < 3$ or $k = 5$. Condone use of y for k but not x for k.

A1: $k \text{ ,, } 3, \quad k = 5$ or e.g. $k \text{ ,, } 3$ or $k = 5$

Condone $k \text{ ,, } 3$ and $k = 5$

Must be in terms of k. Allow $(-\infty, 3]$ for $k \text{ ,, } 3$

An answer of $5 \text{ ,, } k \text{ ,, } 3$ scores M1A0

(c)

B1: -5 only and no other values.

But beware values of x that form part of their working which are clearly not part of their final answer e.g. $f(x) = 0$ when $x = -1$ so $f(x + 4) = 0$ when $x = -5$ scores B1

$x = ...$ is not required so just look for the correct value.

$(-5, 0)$ is B0