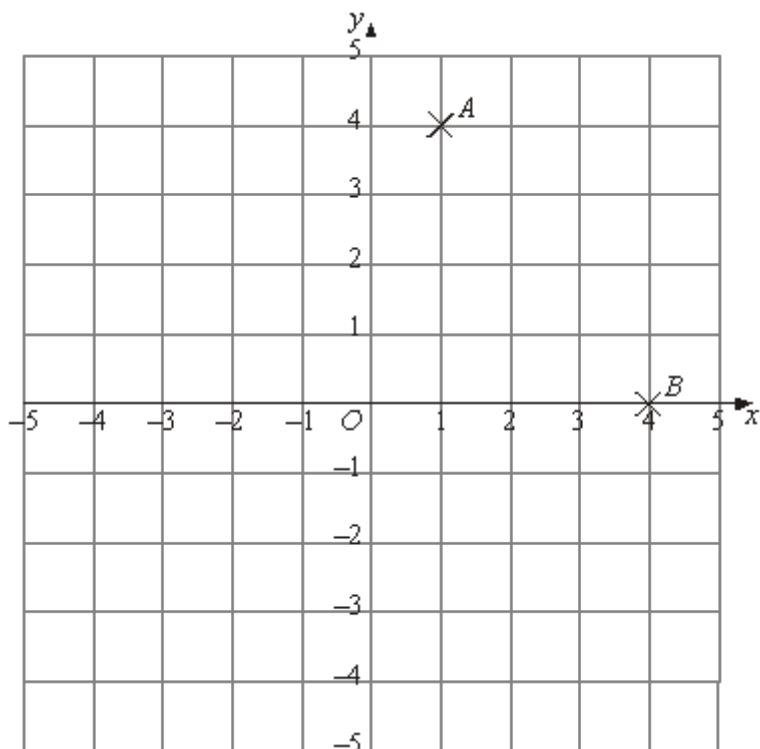


Q1.



(a) (i) Write down the coordinates of the point  $A$ .

(..... , .....)

(ii) Write down the coordinates of the point  $B$ .

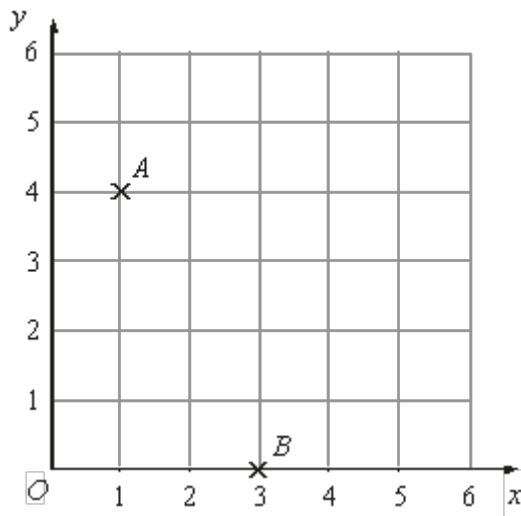
(..... , .....)

(2)

(b) (i) On the grid, plot the point  $(3, 2)$ .  
Label this point  $P$ .

(ii) On the grid, plot the point  $(-4, 3)$ .  
Label this point  $Q$ .

(2)  
(Total 4 marks)

**Q2.**

(a) (i) Write down the coordinates of point *A*.

(..... , .....)

(ii) Write down the coordinates of point *B*.

(..... , .....)

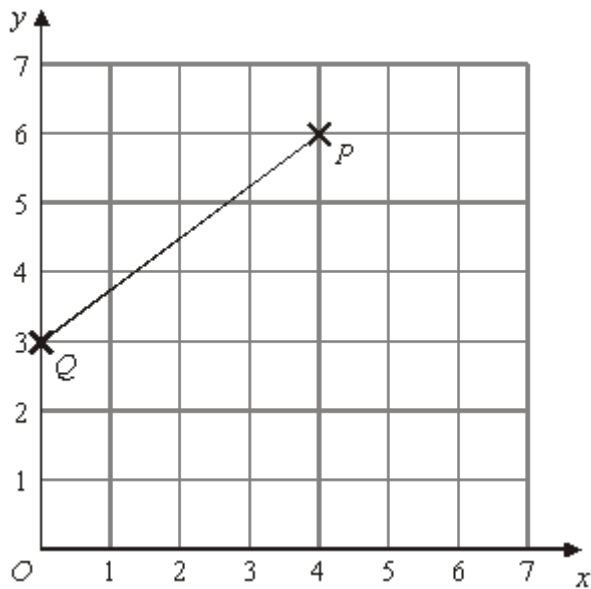
**(2)**

(b) On the grid, mark with a cross (×) the point (5, 2).  
Label this point *C*.

**(1)**

**(Total 3 marks)**

**Q3.**



(a) Write down the coordinates of the point  $P$ .

(..... , .....)

(1)

(b) Write down the coordinates of the point  $Q$ .

(..... , .....)

(1)

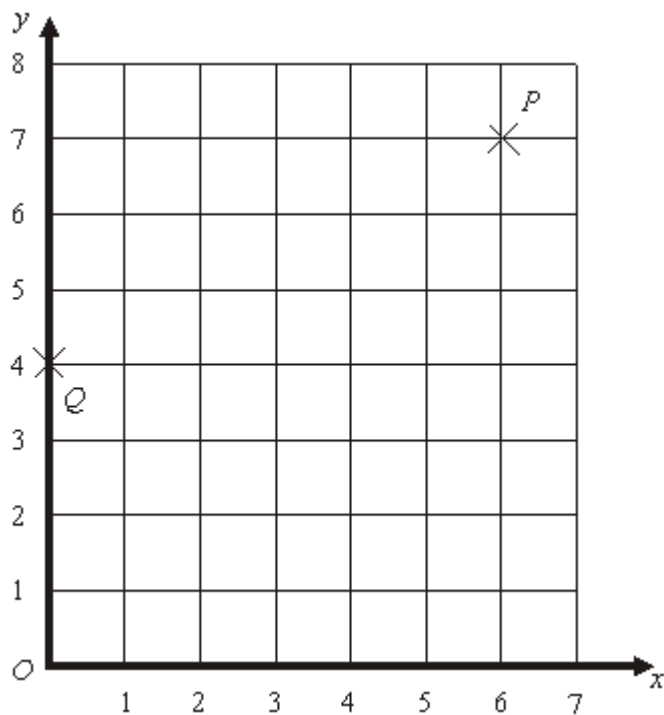
$M$  is the midpoint of the line from  $Q$  to  $P$ .

(c) Find the coordinates of  $M$ .

(..... , .....)

(2)  
(Total 4 marks)

**Q4.** Here is a coordinate grid.



(a) Write down the coordinates of the point  $P$ .

(..... , .....)

(1)

$R$  is the midpoint of  $PQ$ .

(b) Write down the coordinates of the point  $R$ .

(..... , .....)

(2)

The point  $B$  is on the  $x$ -axis.  
The line  $BP$  is parallel to the  $y$ -axis.

(c) Write down the coordinates of the point  $B$ .

(..... , .....)

(2)  
(Total 5 marks)

**M1.**

	Answer	Mark	Additional Guidance
(a)(i)	(1, 4)	2	<b>B1</b> for (1, 4) cao
(ii)	(4, 0)		<b>B1</b> for (4, 0) cao
(b)(i)	<i>P</i> marked at (3, 2)	2	<b>B1</b> for <i>P</i> marked at (3, 2)
(ii)	<i>Q</i> marked at (-4, 3)		<b>B1</b> for <i>Q</i> marked at (-4,3)
<b>Total for Question: 4 marks</b>			

**M2.**

	Answer	Mark	Additional Guidance
(a)(i)	1, 4	2	<b>B1</b> cao
(ii)	3, 0		<b>B1</b> cao
(b)	C correct	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M3.**

	Working	Answer	Mark	Additional Guidance
(a)		(4, 6)	1	<b>B1</b> cao
(b)		(0, 3)	1	<b>B1</b> cao
(c)	$\left(\frac{0+4}{2}, \frac{3+6}{2}\right)$	(2, 4.5)	2	<b>B2</b> for (2, 4.5) $\pm 0.2$ on each coordinate <b>B1</b> for (2, b) $b \neq 4.5$ or (a, 4.5) $a \neq 2$ or (4.5, 2) or $\left(\frac{0+4}{2}, \frac{3+6}{2}\right)$ seen $\pm 0.2$ on each coordinate
<b>Total for Question: 4 marks</b>				

**M4.**

	Working	Answer	Mark	Additional Guidance
(a)		(6, 7)	1	<b>B1</b> cao
(b)		(3, 5.5)	2	<b>M1</b> Clear attempt to find the mean of either x or y coordinates of P and Q  <b>A1</b> cao  <b>OR</b> <b>M1</b> identifies the midpoint of PQ on the diagram  <b>A1</b> cao  SC B1 for exactly one coordinate correct
(c)		(6, 0)	2	<b>M1</b> for B correctly placed on the x axis  <b>A1</b> for (6, 0)
<b>Total for Question: 5 marks</b>				





**E1.** This question was answered well with most candidates gaining at least two of the four marks and many achieving full marks. Errors were seen most often in (a)(ii) where (0, 4) was the most common incorrect answer and in (b)(ii) where the most common error was to plot (3, -4) rather than (-4, 3).

**E2.** A significant proportion of weaker candidates transposed the  $x$  and  $y$  co-ordinates in their answers to part (a) of this question. This error accounted for nearly all the incorrect responses. A similar error occurred in part (b) where candidates were required to plot a point. Instead of the point (5, 2) they plotted the point (2, 5). Some points were not labelled. The mark was awarded if the candidate's answer was unambiguous. Fully correct answers were seen for parts (a) and (b) in 80% and 91% of responses respectively.

**E3.** Most candidates were able to correctly write down the coordinates of points  $P$  and  $Q$ , although a significant number reversed the coordinates to give (6, 4) and (3, 0) respectively. A significant number gave (1, 3) instead of (0, 3).

In part (c), the  $x$ -coordinate (2) was usually correct, but a  $y$ -coordinate of 4 or 5 was common. Some candidates reversed the coordinates to give (4.5, 2). This gained 1 mark only.