

**Maths GCSE****Line Segments (Higher)**

All - Algebra - Straight-Line Graphs - Line Segments

Tier

Variant 5

**Instructions**

- Write all answers in the spaces provided.
- Answer all questions.
- You must show all your working.
- There may not be enough space to show all your working out.

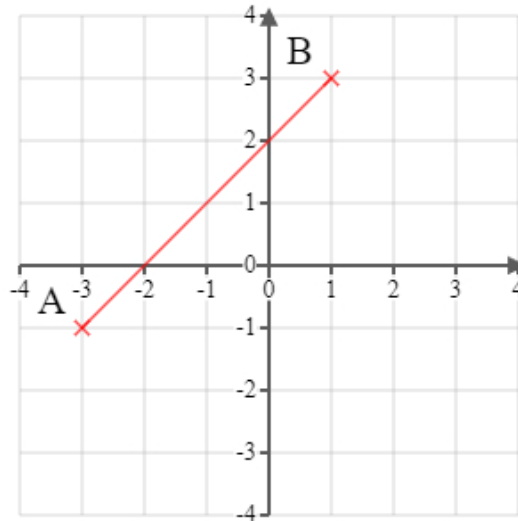
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**Advice**

- You can get support for all these questions at our website: [www.onmaths.com](http://www.onmaths.com)
- This paper and more are available on our site with questions that change subtly after each attempt.
- Good luck!

1



Write down the midpoint of line AB.

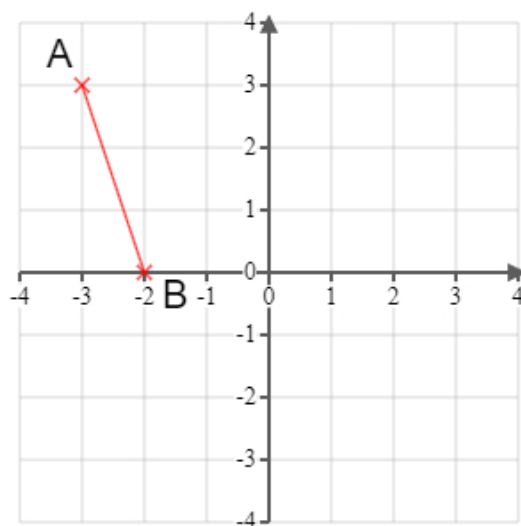
(2 marks)

Find the coordinates of a and b

Use the midpoint formula understanding that A is  $(x_1, y_1)$  and B is  $(x_2, y_2)$

$$\text{midpoint} = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

2



Write down the midpoint of line AB.

(2 marks)

Find the coordinates of a and b

Use the midpoint formula understanding that A is  $(x_1, y_1)$  and B is  $(x_2, y_2)$

$$\text{midpoint} = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

- 3** The points (9, 13) and (19, 8) form a line segment.

Write down the midpoint of the line segment.

(2 marks)

Use the midpoint formula understanding that A is  $(x_1, y_1)$  and B is  $(x_2, y_2)$

$$\text{midpoint} = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

- 4** The points (-14, 10) and (27, -6) form a line segment.

Write down the midpoint of the line segment.

(2 marks)

Use the midpoint formula understanding that A is  $(x_1, y_1)$  and B is  $(x_2, y_2)$

$$\text{midpoint} = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$