Name:

Exam Style Questions

Distance between 2 coordinates

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

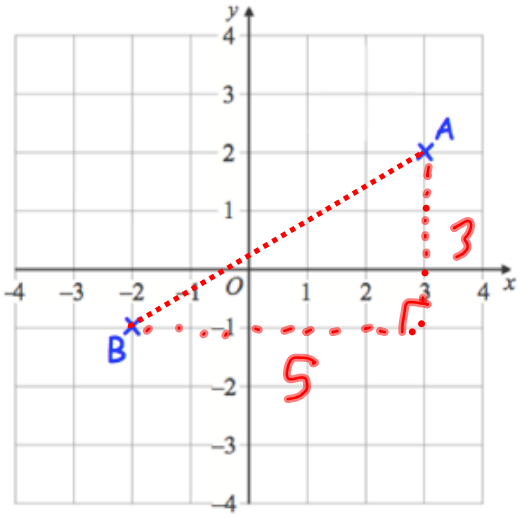
1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

Secondary

Video 88

1.



Work out the distance between the coordinates A and B.

$a^2 + b^2 = c^2$

$3^2 + 5^2 = c^2$

$9 + 25 = c^2$

$34 = c^2$

$c = \sqrt{34} = 5.83$

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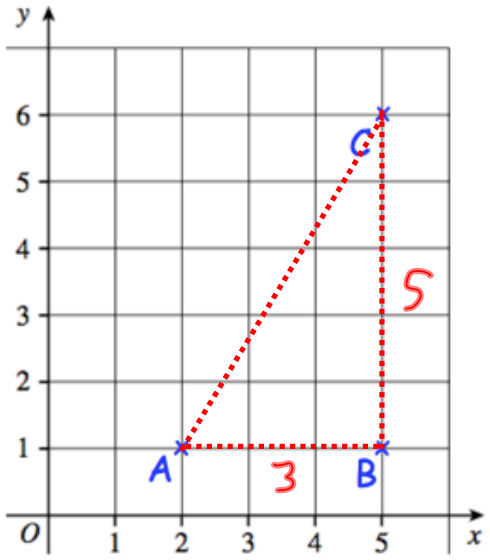
(3)

2. Three points are shown on the grid.



(a) Write down the distance between B and C.

5

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(1)

(b) Write down the distance between A and C.

$3^2 + 5^2 = c^2$

$9 + 25 = c^2$

$34 = c^2$

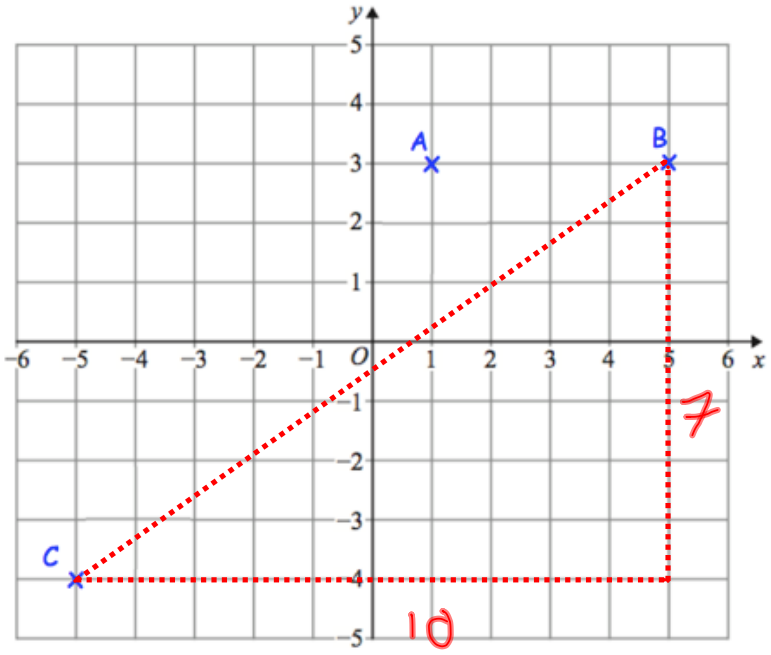
$c = \sqrt{34}$

5.83

.....

(3)

3.



Work out the distance between the coordinates B and C.

$7^2 + 10^2 = c^2$

$49 + 100 = c^2$

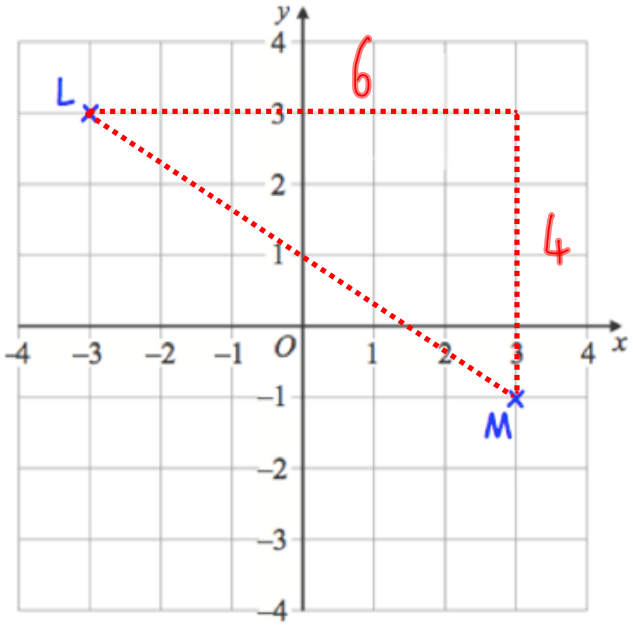
$c^2 = 149$

$c = \sqrt{149}$

12.2

(3)

4.



Work out the distance between the coordinates L and M.

$4^2 + 6^2 = c^2$

$16 + 36 = c^2$

$c^2 = 52$

$c = \sqrt{52}$

$c = 2\sqrt{13}$

7.211

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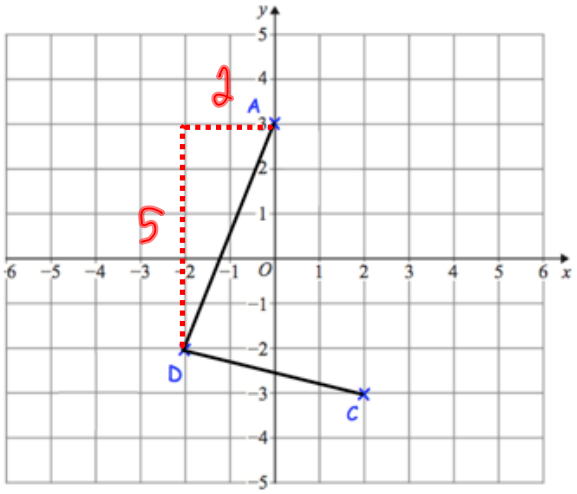
(3)

5. The points A (0, 3), C (2, -3) and D (-2, -2) are shown.



Calculate the length of line segment AD.

$2^2 + 5^2 = c^2$

$4 + 25 = c^2$

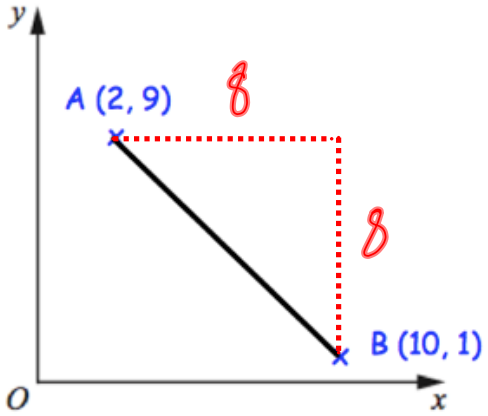
$c^2 = 29$

$c = \sqrt{29}$

5.385

(3)

6.



A is the point with coordinates (2, 9).
B is the point with coordinates (10, 1).

Calculate the length of the line segment AB.

$8^2 + 8^2 = c^2$

$64 + 64 = c^2$

$128 = c^2$

$c = 8\sqrt{2}$

11.314

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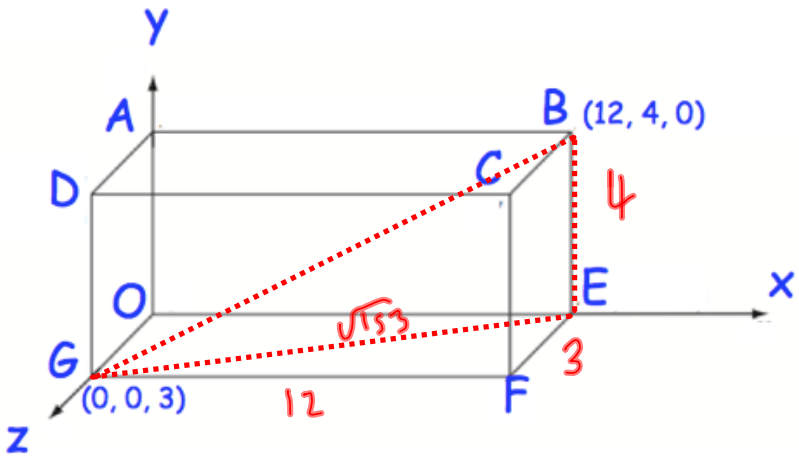
(3)

7.



B is the point with coordinates (12, 4, 0).
G is the point with coordinates (0, 0, 3).

Calculate the distance between the coordinates B and G.

$EG^2 = 3^2 + 12^2$

$EG^2 = 153$

$EG = \sqrt{153}$

$EG = 3\sqrt{17}$

$BG^2 = 4^2 + (\sqrt{153})^2$

$BG^2 = 16 + 153$

$BG^2 = 169$

$BG = 13$

13

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(4)