Summer Term Maths Year 10

Use Pythagoras' Theorem to find the length of a line segment

Day 4

Week 11

1 Calculate each of the following

a) $(5-1)^2$ 16

b) $(1-5)^2$ 16

c) $(1-(-5))^2$ 36

d) $((-5)-1)^2$ 36

2 Calculate each of the following to 2 decimal places

(a) $\sqrt{4^2+1^2}$ 4.12

(b) $\sqrt{4^2+(-1)^2}$ 4.12

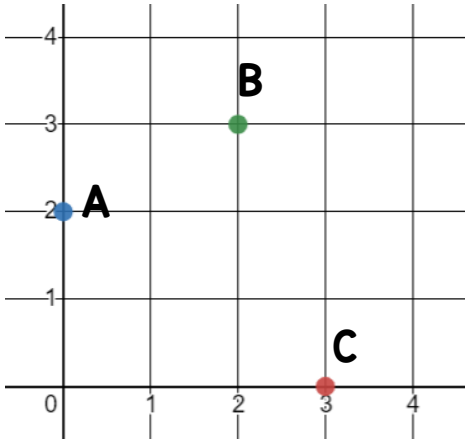
(c) $\sqrt{(4-2)^2+(1-(-2))^2}$ 3.61

3 Find the coordinates of the points described.

a) 4 left and 3 up from (3, 7) (-1, 10)

b) 4 left and 3 up from (−3, 7) (-7, 10)

4



a) Find the lengths OA and OC 2 cm, 3 cm

b) Use Pythagoras' theorem to find the exact length of AC 3.61 cm

c) Find the length of AB to 3 significant figures 2.24 cm

d) Find the perimeter of the quadrilateral OABC to 3 significant figures. 10.4 cm

White Rose Maths

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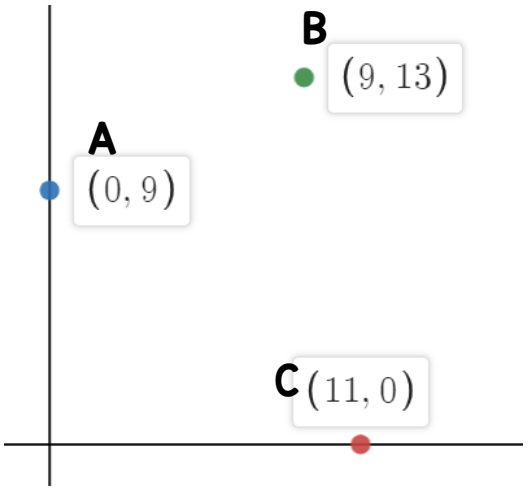
5



15.8 cm

a) Find the distance from the origin to the point B to 3 significant figures.

b) Find the perimeter of the triangle AOC, where O is the origin. 34.2 cm

c) Find the distance between the point $(-2, 0)$ and the point A. 9.22 cm

6 Find the distance between each pair of points.

a) $(0, 0)$ and $(4, 9)$ 9.85 cm

b) $(2, 0)$ and $(4, 9)$ 9.22 cm

c) $(-2, 0)$ and $(4, 9)$ 10.82 cm

d) $(-2, -2)$ and $(4, 9)$ 12.52 cm

7 The points A and B both on the line $y = 3x - 8$ A has x-coordinate 3 and B has x-coordinate -4

Find the distance between A and B.

22.14 cm

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