

**10th July**

Corbettmaths

Find the gradient of the line passing through the points

$$(3\sqrt{5}, \sqrt{5}) \text{ and } (11\sqrt{5}, 3)$$

give your answer in the form  $a + b\sqrt{5}$

Solve the simultaneous equations

$$2x + y - z = 3$$

$$6x + 3y + z = 25$$

$$4x - 3y - 2z = 1$$

$$y = x^3 - \frac{1}{2x^4}$$

Work out  $\frac{dy}{dx}$

The three vertices of a triangle are A(4, -2), B(4, 5) and C(11, 8)

Calculate the area of triangle ABC