

Quadratic Formula

Solve $2x^2 + 3x - 7 = 0$
Give your answers to 2dp

Because this quadratic won't factorise we have to use the quadratic formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

This can be found on the formula page

We can identify $a = 2$, $b = 3$ and $c = -7$

We can now substitute into the formula

$$x = \frac{-(3) \pm \sqrt{(3)^2 - 4(2)(-7)}}{2(2)}$$

We enter this into our calculator, once with a plus sign and once with a minus sign. This gives us two answers.

$$x = 1.27 \text{ or } x = -2.77$$