

Simplify $\sqrt{175}$

$$\sqrt{25} \times \sqrt{7}$$

$$5\sqrt{7}$$

Solve $x^2 + 70 = 17x$

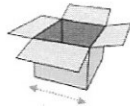
$$x^2 + 70 = 17x$$

$$x^2 - 17x + 70 = 0$$

$$(x - 7)(x - 10) = 0$$

$$x = 7 \quad \text{or} \quad x = 10$$

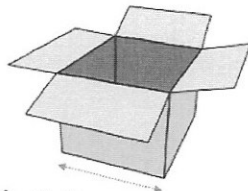
Small



10cm

 $\times 3$

Large



30cm

Shown are two boxes that are mathematically similar.

The volume of the small box is 500cm^3 .
Work out the volume of the larger box.

$$500 \times 3^3 = 13500\text{cm}^3$$

The probability Freya passes a test is 0.8.

The probability both Freya and Orla pass a test is 0.5.

$$P(F \cap O) = 0.8 \times y$$

$$0.8y = 0.5$$

What is the probability Orla passes the test?

$$y = \frac{0.5}{0.8}$$

$$y = \frac{5}{8}$$

What is the probability both Freya and Orla fail the test?

$$\frac{3}{8} \times 0.2$$

$$\frac{3}{8} \times \frac{1}{5} = \frac{3}{40}$$