

4th October



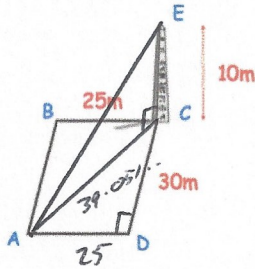
Corbettmaths

Estimate $\sqrt[4]{800}$

$$5 \times 5 \times 5 \times 5 = 625$$

$$6 \times 6 \times 6 \times 6 = 1296$$

$$5.2 / 5.3 / 5.4$$



Calculate the length of AE

$$AC^2 = 25^2 + 30^2$$

$$AC^2 = 1525$$

$$AC = 39.051\dots$$

$$AE^2 = (39.051\dots)^2 + 10^2$$

$$AE = 40.311 \text{ m}$$

Solve $5y^2 + 8y - 100 = y^2 + 4y - 37$

$$4y^2 + 4y - 63 = 0$$

$$(2x - 7)(2x + 9) = 0$$

$$x = -\frac{9}{2} \quad \text{or} \quad x = \frac{7}{2}$$

Expand $\sqrt{3}(\sqrt{5} + \sqrt{2})$

$$\sqrt{15} + \sqrt{6}$$

Two solids are mathematically similar.
 The surface area of the smaller solid is $42\pi \text{ cm}^2$
 The surface area of the larger solid is $1512\pi \text{ cm}^2$
 The height of the larger solid is 96cm.

Work out the height of the smaller solid.

$$1512\pi \div 42\pi = 36$$

$$\begin{array}{l} \text{Sides} \times 6 \\ \text{Area} \times 36 \end{array}$$

$$96 \div 6 = 16 \text{ cm}$$