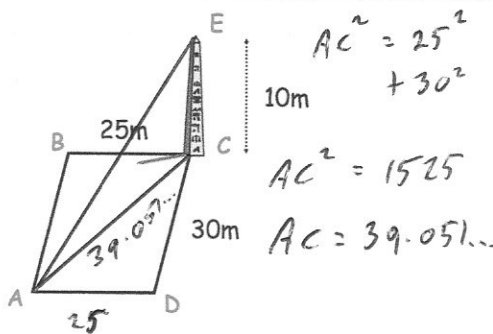


Estimate  $\sqrt[4]{800}$ 

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

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

$$5.2 \text{ to } 5.4$$



An obelisk is situated in the corner of a rectangular field (drawn from 3D perspective).

Calculate the distance AE.

Solve

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

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

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

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

$$y = 3.5 \quad \text{or} \quad y = -4.5$$

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.

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

$$\text{sides} \times 6$$

$$\text{Areas} \times 36$$

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