

25th November

Corbettmaths

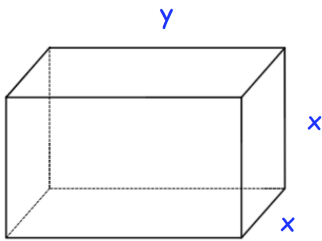
Simplify fully $\frac{20 - \sqrt{50}}{3\sqrt{2} - 5}$

Give your answer in the form $a + b\sqrt{2}$

Angle θ is reflex and $\cos\theta = \frac{3}{4}$

Work out the value of $\sin\theta$

Shown below is a metal box in the shape of a cuboid.



The volume of the box is 80cm^3

Show that $y = \frac{80}{x^2}$

Show that the area of metal to make the box is given by

$$A = 2x^2 + \frac{320}{x}$$

Use differentiation to find the value of x for which A is a minimum