

7th January



Corbettmaths

Make  $x$  the subject of  $A = \frac{1}{2}(x + y)$ 

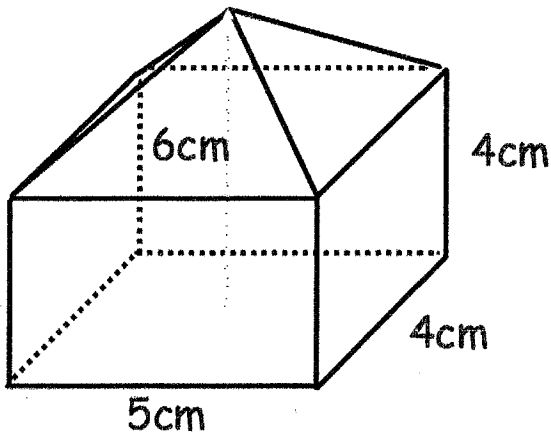
$$A = \frac{1}{2}x + \frac{1}{2}y$$

$$2A = x + y$$

$$2A - y = x$$

Evaluate

$$36^{\frac{1}{2}} = 6$$



$$\text{Cuboid} = 5 \times 4 \times 4 = 80$$

$$\text{Pyramid} = \frac{1}{3} \text{ base} \times \text{height}$$

$$\text{height} = 2 \quad \text{base} = 20$$

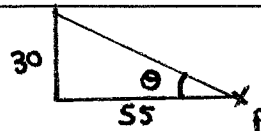
$$= \frac{40}{3} = 13\frac{1}{3}$$

Shown is a solid that is made of a pyramid and a cuboid.

Calculate the volume of the solid.

$$\text{Total} = 93\frac{1}{3}$$

A boat leaves a port and sails 55 km due west and then 30 km due north and arrives at an oil rig. What is the bearing of the oil rig from the port?



$$\theta = 28.61\dots$$

$$\text{Bearing} = 270 + \theta = 299^\circ \text{ (3sf)}$$