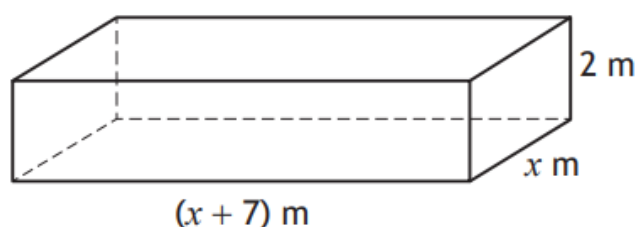




A storage unit, built in the shape of a cuboid, is shown.



It has length $(x + 7)$ metres, breadth x metres and height 2 metres.

The volume of this unit is 45 cubic metres.

- (a) Show that $2x^2 + 14x - 45 = 0$. 2
- (b) Calculate x , the breadth of the storage unit.
Give your answer correct to 1 decimal place. 4

Answers:

- (a) Use the dimensions of the cuboid to find an expression for the volume. Then rearrange it into the required form.
- (b) $x = 2.4$