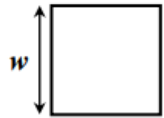


1

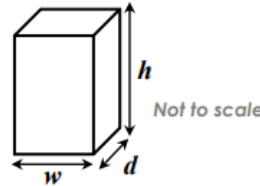
6a. Work out the perimeter (p) of this shape using the formula $p = 4w$, if $w = 2.3\text{cm}$.



Not to scale



10a. Work out the volume (v) of this cuboid using the formula $v = w \times h \times d$, if $w = 3\text{cm}$, $h = 5.5\text{cm}$ and $d = 2\text{cm}$.



Not to scale



2

8a. To calculate the price of a taxi (p), the firm decide to charge £0.75 per mile (m).

Expressed as the formula:

$$0.75m = p$$

If a journey is 8 miles, how much will a taxi cost?



8b. When baking cupcakes, Sara needs half the amount of sugar (s) as flour (f).

Expressed as the formula:

$$s = \frac{f}{2}$$

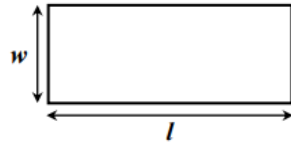
How much sugar will she need if she uses 250g of flour?



3

4a. Jaiden is calculating the perimeter of a rectangle.

He is using the formula $p = 2w + 2l$.



When $l = 6.5\text{cm}$, he calculates that $p = 19\text{cm}$.

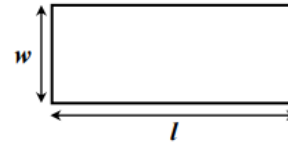
What is the value of w ?



Not to scale

4b. Sophia is calculating the area of a rectangle.

She is using the formula $a = w \times l$.



When $l = 12\text{cm}$, she calculates that $a = 60\text{cm}^2$.

What is the value of w ?



Not to scale

4

5b. Here is a formula for the amount of pet food (f) needed over 2 weeks.

$$f = w \times m$$

A puppy weighs 6kg (w) and is 8 months old (m). His owner has bought 40kg of food to use for the next 2 weeks.

Does his owner have enough pet food? Convince me.



8a. Here is a formula for the minimum amount of exercise in minutes (e) that a puppy needs each day.

$$e = \frac{(w \times a)}{2}$$

A puppy weighs 8kg (w) and is 16 months old (a). Her owner plans to walk her for half an hour each day.

Is this enough? Convince me.

