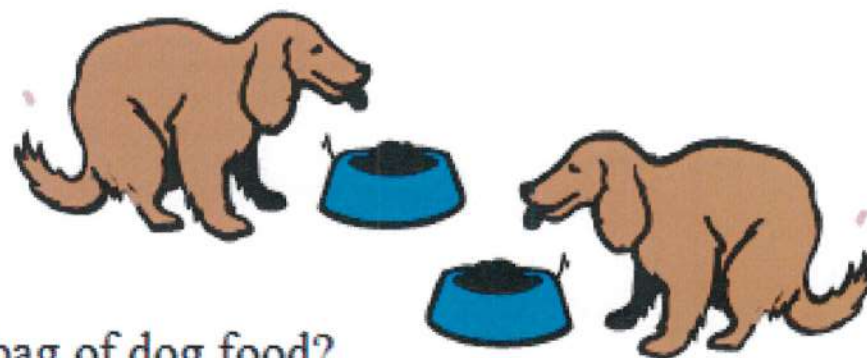Susan has 2 dogs

Each dog is fed $\frac{3}{8}$ kg of dog food each day.
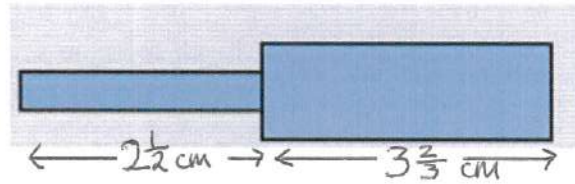Susan buys dog food in bags that each weigh 14kg.

For how many days can Susan feed the dogs from 1 bag of dog food?
You must show **all** your working.

Functional Fractions

Diagram **NOT** accurately drawn

$1\frac{2}{3}$ m

$2\frac{1}{2}$ m

Find the area of the rectangle

Solution

2½ x 1⅔

$$\frac{5}{2} \times \frac{5}{3} = \frac{25}{6}$$

$$= 4\frac{1}{6}$$

Area $= 4\frac{1}{6}$ m²

The diagram represents a machine part.

$\leftarrow 2\frac{1}{2}$ cm $\rightarrow \leftarrow 3\frac{2}{3}$ cm $\rightarrow$

Find the total length of the part.

Solution

2½ + 3⅔

$$2 + 3 = 5$$

$$\frac{1}{2} + \frac{2}{3} = \frac{3+4}{6} = \frac{7}{6}$$

$$= 1\frac{1}{6}$$

Total length $= 5 + 1\frac{1}{6}$

$$= 6\frac{1}{6} cm$$

The length of a ribbon is $13\frac{1}{2}$ cm

We need to cut off $2\frac{4}{5}$ cm so it fits around the top tier.
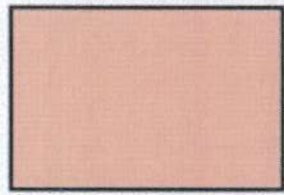How much ribbon do we need for the top tier?

Solution

$13\frac{1}{2} - 2\frac{4}{5}$

$$\frac{27}{2} - \frac{14}{5} = \frac{135-28}{10}$$

$$= \frac{107}{10}$$

$$= 10\frac{7}{10}$$

We need $10\frac{7}{10}$ cm of ribbon for the top tier.