

Lesson 14 – Fraction of an Amount

Starter

- 1) Simplify $2\frac{48}{96}$
- 2) Change 0.0012 to a fraction in its simplest form
- 3) What fraction is 56 of 64?
- 4) Change $\frac{21}{9}$ to a mixed number

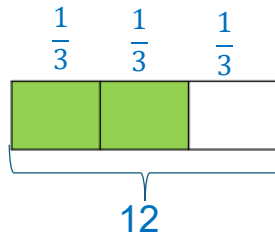
Starter Answers

- 1) $2\frac{1}{2}$ 2) $\frac{12}{10000} = \frac{6}{5000} = \frac{3}{2500}$ 3) $\frac{56}{64} = \frac{7}{8}$ 4) $2\frac{1}{3}$

Example 1

Find $\frac{2}{3}$ of 12

First draw $\frac{2}{3}$:

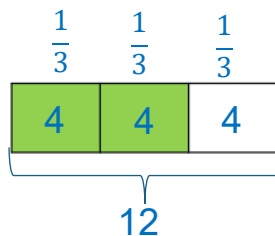


The whole shape is worth 12

Split 12 into 3 equal parts so that we can find the value of one section.

$$12 \div 3 = 4$$

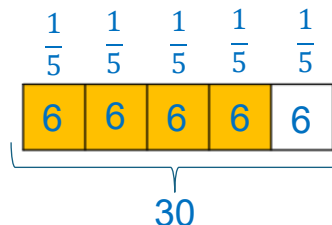
This means $\frac{1}{3}$ is worth 4



We can see from the diagram that $\frac{2}{3}$ of 12 is 8

Example 2

Find $\frac{4}{5}$ of 30



The whole shape is worth 30

$30 \div 5 = 6$, so $\frac{1}{5}$ is worth 6

We can see that $\frac{4}{5}$ of 30 = $4 \times 6 = 24$

Your go

- 1) $\frac{3}{4}$ of 36
- 2) $\frac{2}{5}$ of 35
- 3) $\frac{7}{11}$ of 66

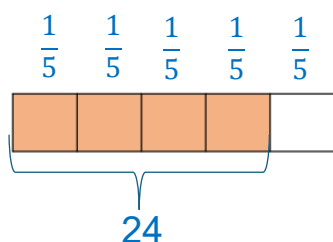
Answers

- 1) 27 2) 14 3) 42

Example 3

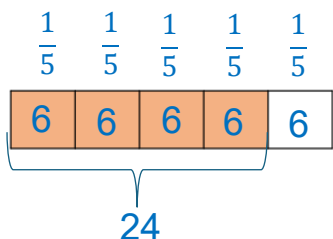
$\frac{4}{5}$ of a number is 24. What is the number?

This time, it is the four fifths that is worth 24, not the whole shape



We need to split 24 into 4 parts: $24 \div 4 = 6$

So, each section is worth 6



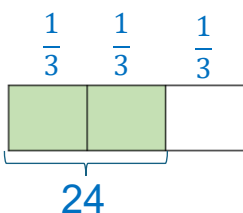
Now count up what the whole shape is worth.

$$5 \times 6 = 30$$

The number is 30.

Example 4

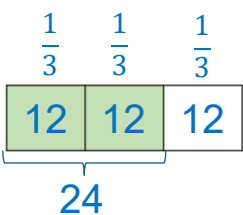
$\frac{2}{3}$ of a number is 24. What is $\frac{7}{9}$ of the number?



Two thirds is worth 24. So split 24 into 2 parts:

$$24 \div 2 = 12$$

Each part is worth 12.



So the whole shape is worth $12 + 12 + 12 = 36$

Now we do $\frac{7}{9}$ of 36: $36 \div 9 = 4$

$$4 \times 7 = \underline{28}$$