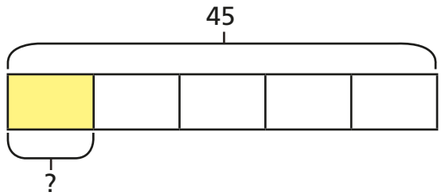
Fractions of an amount

1 Annie and Mo are finding fractions of amounts.

a) Annie is trying to find $\frac{1}{5}$ of 45

She draws this bar model.

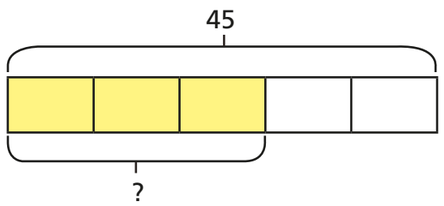


How does the bar model represent the calculation?

What is $\frac{1}{5}$ of 45?

9

b) Mo is trying to find $\frac{3}{5}$ of 45



How does the bar model represent the calculation?

What is $\frac{3}{5}$ of 45?

27

c) What is the same and what is different about Mo and Annie's questions?

2 Complete the calculations.

a) $\frac{1}{3}$ of 27 = 9 **b)** $\frac{1}{3}$ of 72 = 24 **c)** $\frac{1}{3}$ of 90 = 30

$\frac{2}{3}$ of 27 = 18 $\frac{1}{6}$ of 72 = 12 $\frac{2}{6}$ of 90 = 30

$\frac{3}{3}$ of 27 = 27 $\frac{1}{12}$ of 72 = 6 $\frac{3}{9}$ of 90 = 30

What patterns do you notice?

3 Match the calculations to the correct amounts.

$\frac{5}{8}$ of 48	32
$\frac{2}{3}$ of 48	40
$\frac{5}{6}$ of 48	30
$\frac{3}{4}$ of 48	36

4 Write <, > or = to compare the calculations.

a) $\frac{5}{7}$ of 56 **>** $\frac{5}{8}$ of 56

b) $\frac{4}{7}$ of 56 **<** $\frac{5}{8}$ of 56

c) $\frac{2}{3}$ of 63 **>** $\frac{5}{8}$ of 64

d) $\frac{7}{10}$ of 350 **<** $\frac{5}{7}$ of 350

5 165 children and adults go on a school trip.

Two thirds of the people are children.

a) How many adults are on the school trip?

55

b) $\frac{3}{5}$ of the children are boys.

How many boys are on the school trip?

66

c) $\frac{7}{10}$ of the children have an apple for lunch.

How many children do **not** have an apple for lunch?

33

6 Tick the odd one out.

$\frac{3}{4}$ of 80	$\frac{3}{8}$ of 160	$\frac{2}{3}$ of 90	$\frac{3}{4}$ of 100

Explain your choice.

Various answers.

7 320 people were asked about their favourite flavour of ice cream.

Here is a pictogram showing the results.

vanilla	🍦🍦🍦🍦🍦
strawberry	🍦🍦🍦🍦🍦
chocolate	🍦🍦🍦
mint choc chip	🍦🍦🍦🍦🍦🍦🍦

a) How many people chose mint choc chip?

126

b) How many more people chose vanilla than chocolate?

32