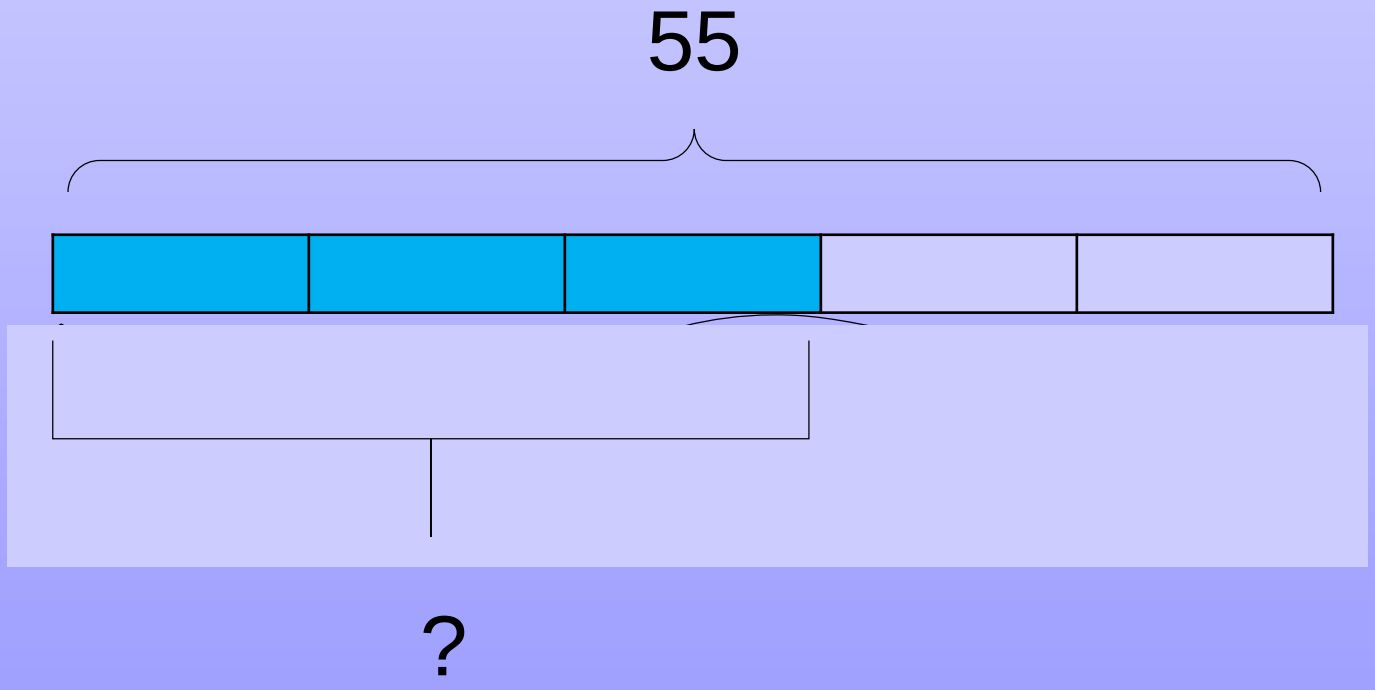

FRACTIONS OF WHOLE NUMBERS

# What is $\frac{3}{5}$ *of* 55?

By looking at the denominator we know that the whole is broken into 5.



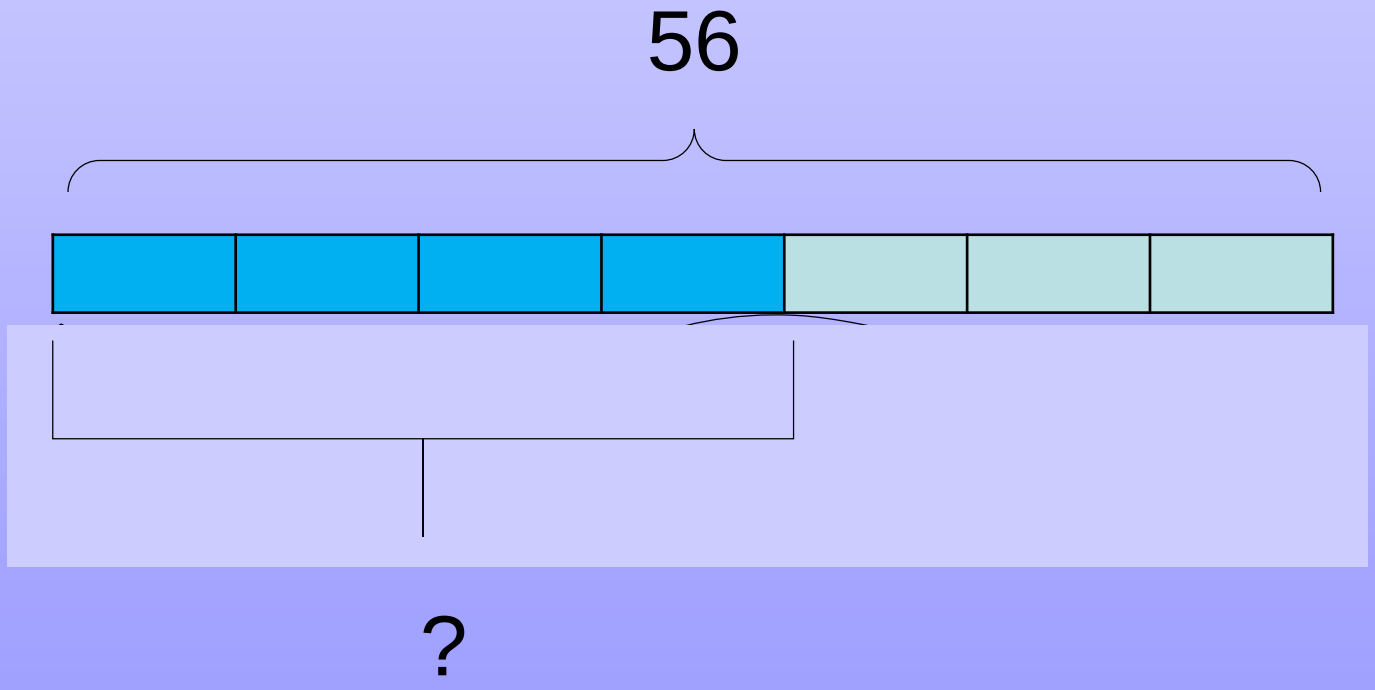

To work out the value follow this formula

**Whole number ÷ denominator x numerator**

**55 ÷ 5 = 11 x 3= 3**

# What is $\frac{4}{7}$ *of* 56?

What about this one?.




**Whole number ÷ denominator x numerator**

# What is $\frac{4}{7}$ *of* 56?

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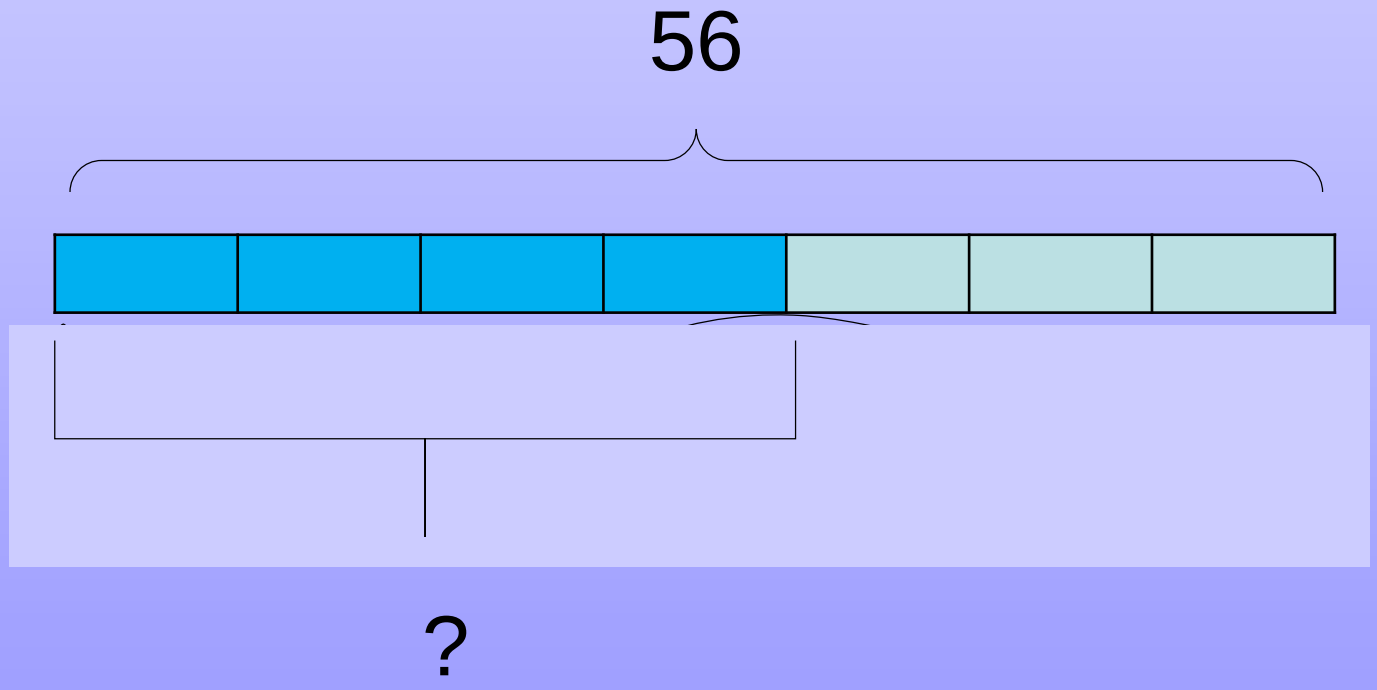
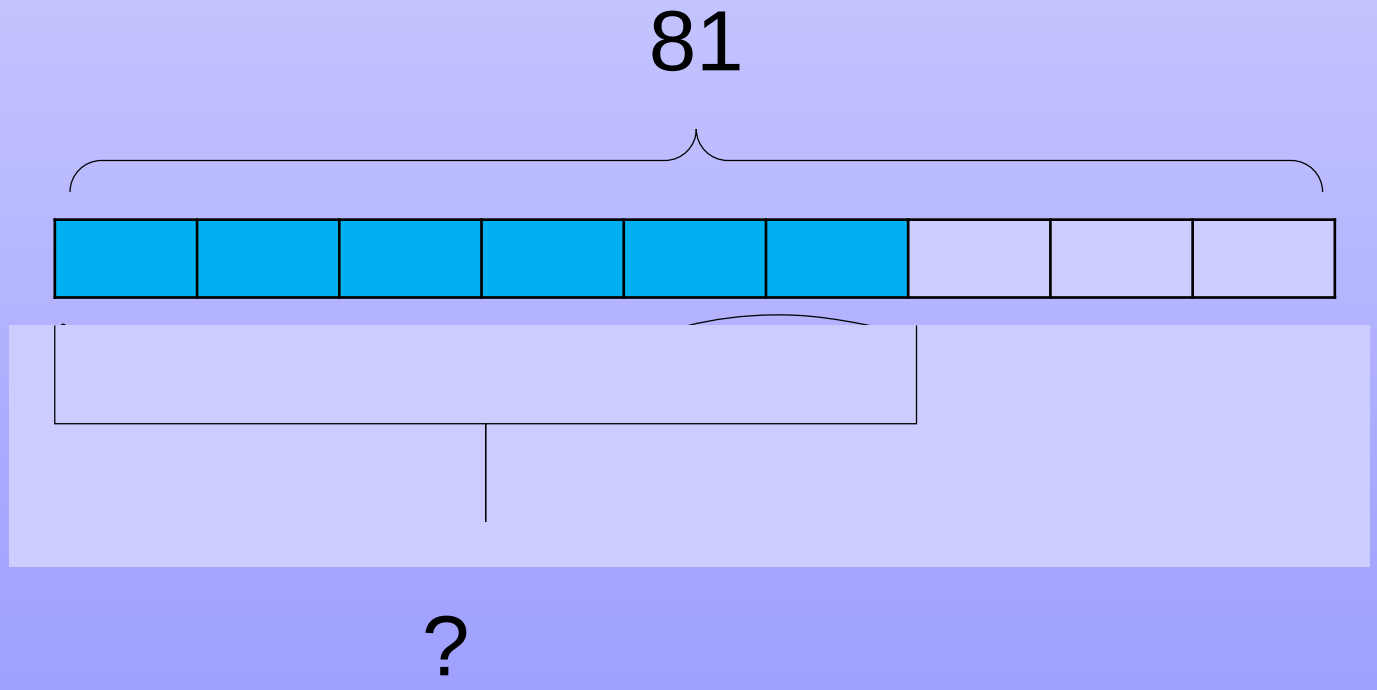



**Whole number ÷ denominator x numerator**
**56 ÷ 7= 8 x 4 = 32**

# What is $\frac{6}{9}$ *of* 81?

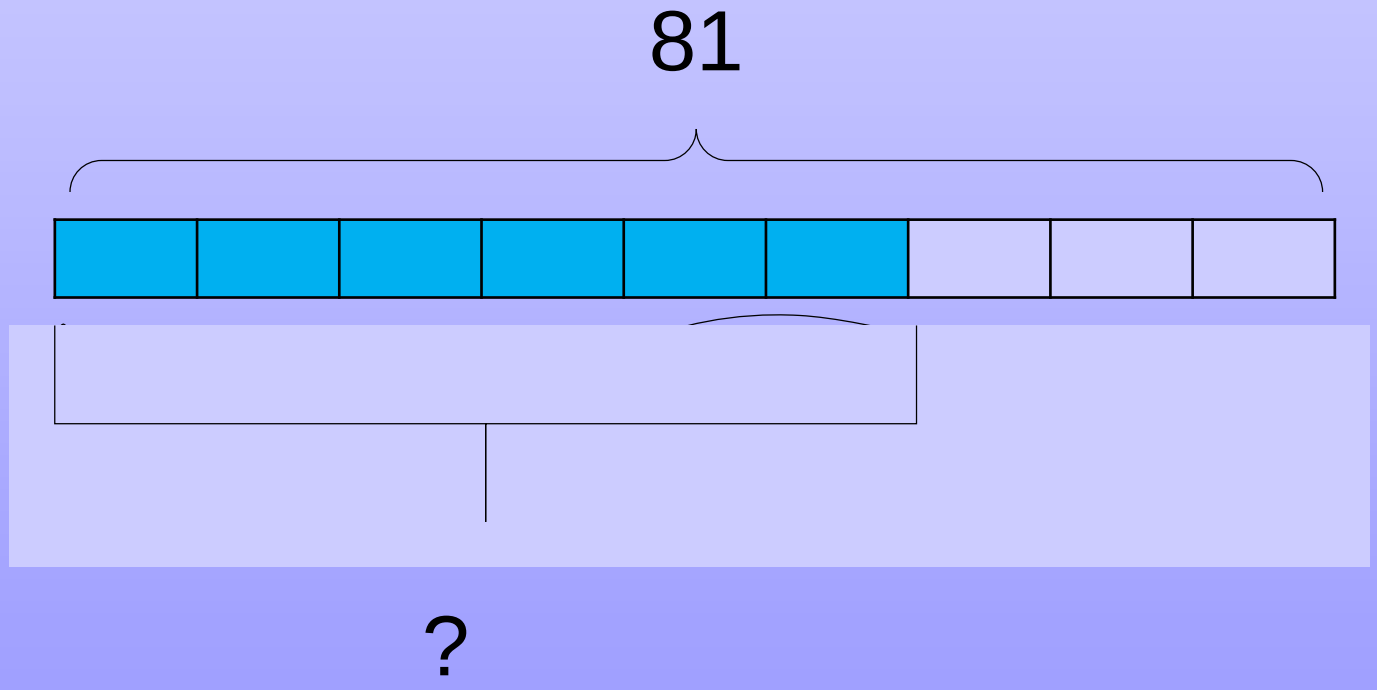
What about this one?.




**Whole number ÷ denominator x numerator**

# What is $\frac{6}{9}$ *of* 81?

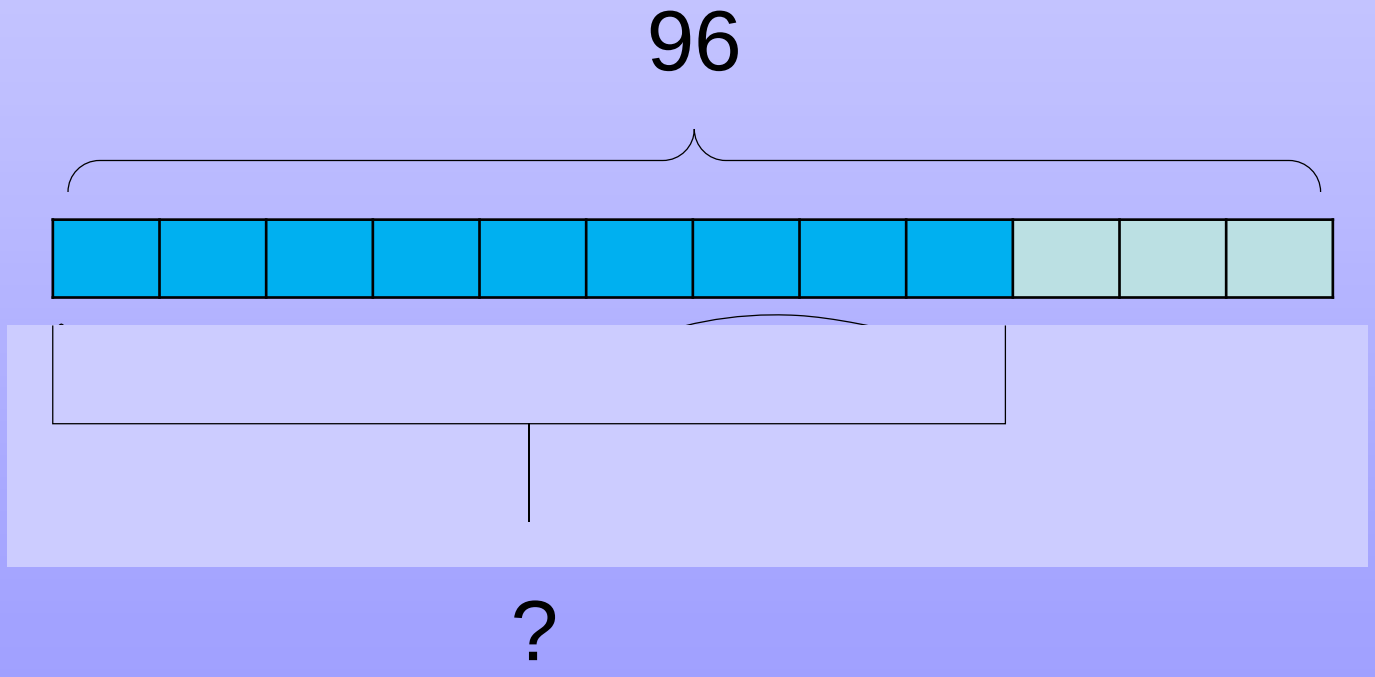
What about this one?.




**Whole number ÷ denominator x numerator**
**81 ÷ 9= 9 x 6 = 54**

# What is $\frac{9}{12}$ *of* 96?

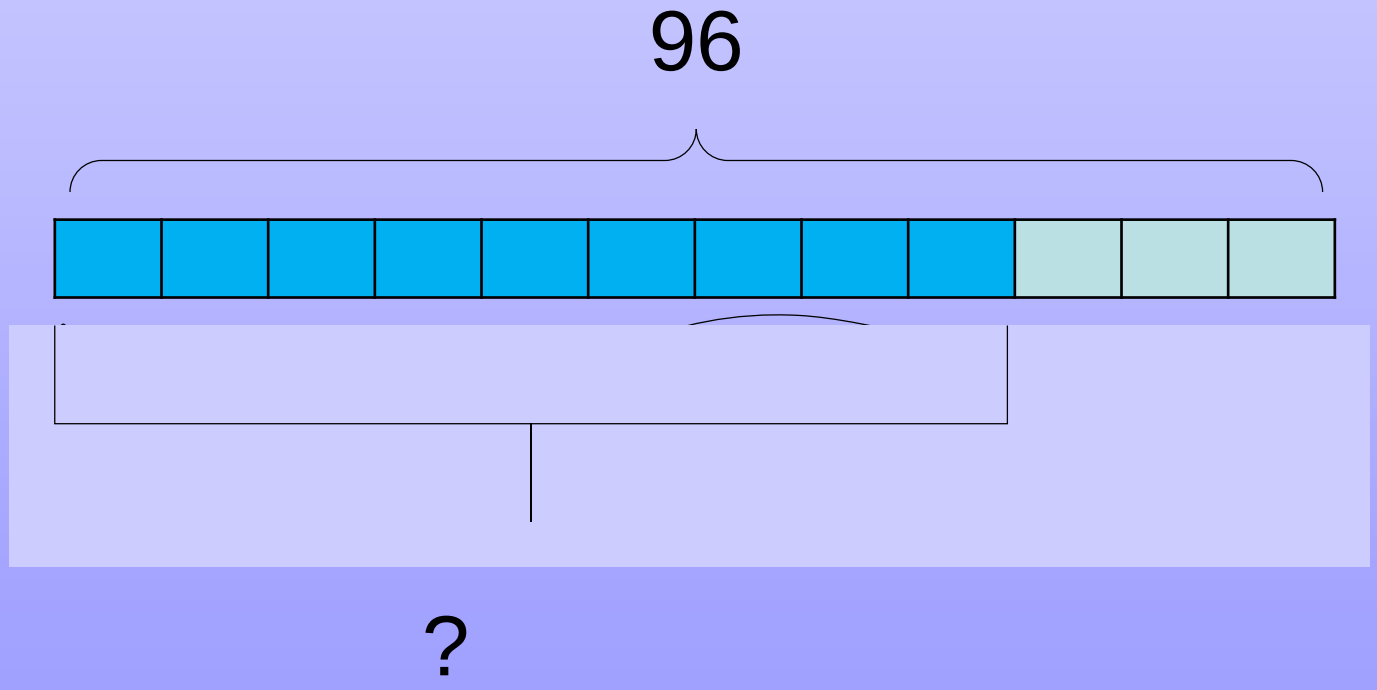
What about this one?.




**Whole number ÷ denominator x numerator**

# What is $\frac{9}{12}$ *of* 96?

What about this one?.




**Whole number ÷ denominator x numerator**
**96 ÷ 12= 8 x 9 = 72**

Now try these

Complete the calculations.

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

$\frac{2}{3}$ of 27 = ☐ $\frac{1}{6}$ of 72 = ☐ $\frac{2}{6}$ of 90 = ☐

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

What patterns do you notice?

Complete the calculations.

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

$\frac{2}{3}$ of 27 = ☐ $\frac{1}{6}$ of 72 = ☐ $\frac{2}{6}$ of 90 = ☐

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

What patterns do you notice?

a) 9
18
27

b) 24
12
6

c) 30
30
30

# Can you apply this skill in a word problem

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?

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

How many boys are on the school trip?

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

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

# How did you do

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?

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

How many boys are on the school trip?

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

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

a) You need to work out the value of $\frac{1}{3}$.
So 165÷ 3=55
There are 55 adults and 110 children

b)We need to work out $\frac{3}{5}$ of 110.
110÷ 5=22
22 x 3 = 66

There are 66 boys on the trip.

c) If we know $\frac{7}{10}$ have an apple this tells us $\frac{3}{10}$ didn't have an apple. So 110÷ 10=11
11 x 3 = 33.
33 children did not have an apple

# What about tricky word problems?

In a flower shop $\frac{7}{12}$ of the tulips are red.

If there are 56 red tulip, how many tulips are there in total in the shop?

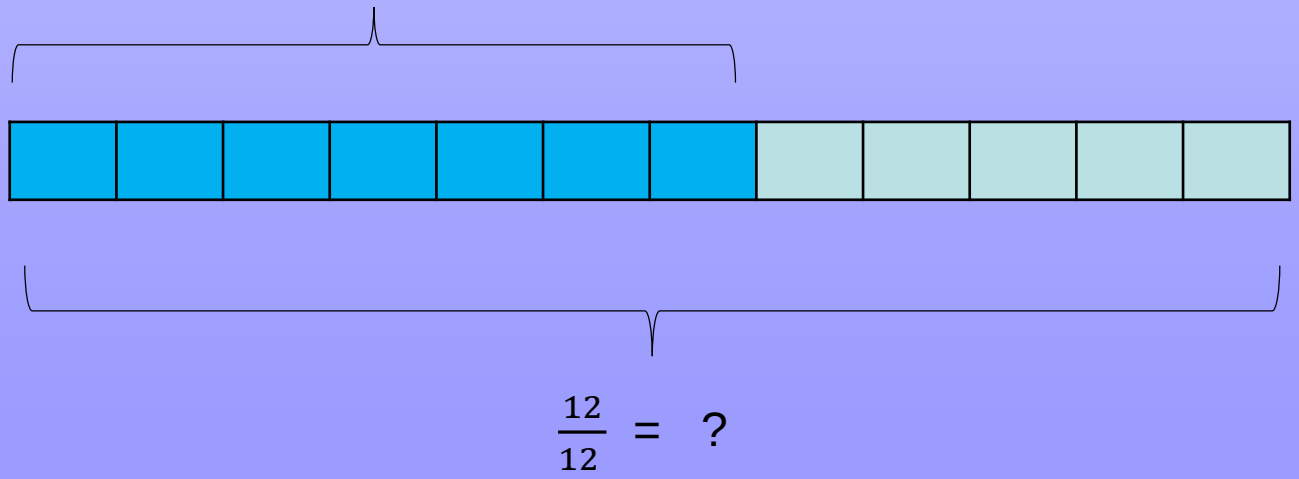
Hmmmm how shall we tackle this one?

# What about tricky word problems?

In a flower shop $\frac{7}{12}$ of the tulips are red.

If there are 56 red tulip, how many tulips are there in total in the shop?

Lets try a bar model $\frac{7}{12} = 56$



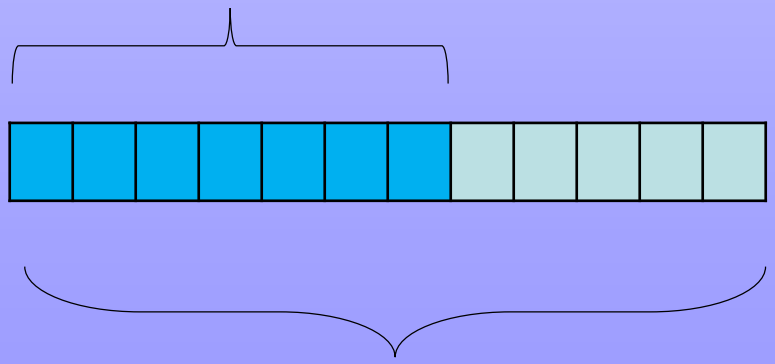
# What about tricky word problems?

In a flower shop $\frac{7}{12}$ of the tulips are red.

If there are 56 red tulip, how many tulips are there in total in the shop?

Lets try a bar model

$\frac{7}{12}$ = 56



$\frac{12}{12}$ = 96

This time we divide by the numerator.
56 ÷ 7 = 8
Then we multiply by the denominator.
8 x 12 =96

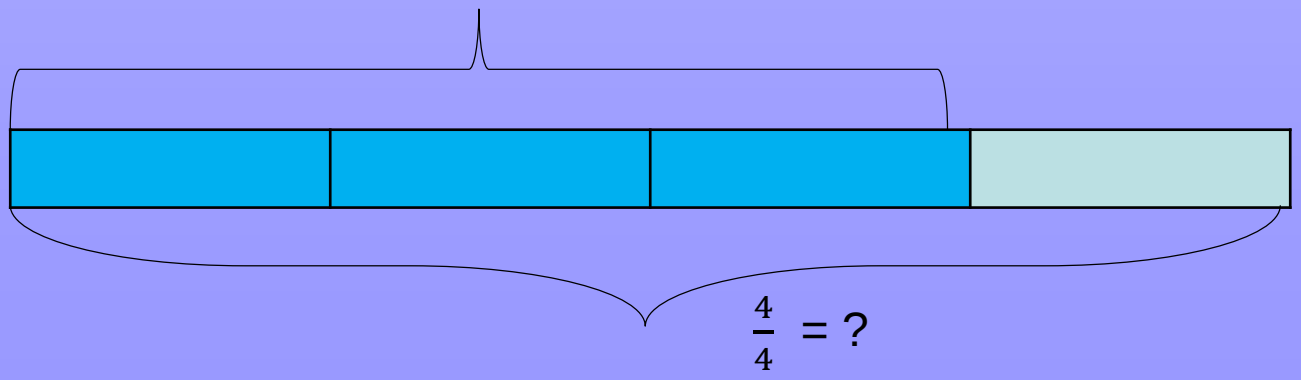
# You try this one

**Remember the steps:**
**Divide by the NUMERATOR**
**Multiply by the DENOMINATOR**

In a café $\frac{3}{4}$ of the table cloths have spots on.

If there are 39 spotty table cloths, how many table cloths are there in total in the café?

$\frac{3}{4}$ = 39



# You try this one

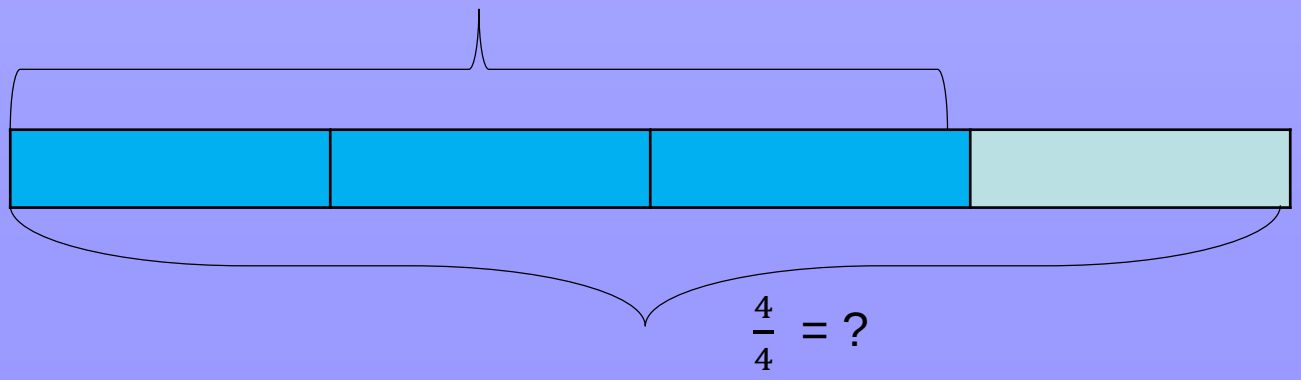
Answer:
There are 52 table cloths in total.

**Remember the steps:**
**Divide by the NUMERATOR**
**Multiply by the DENOMINATOR**

In a café $\frac{3}{4}$ of the table cloths have spots on.

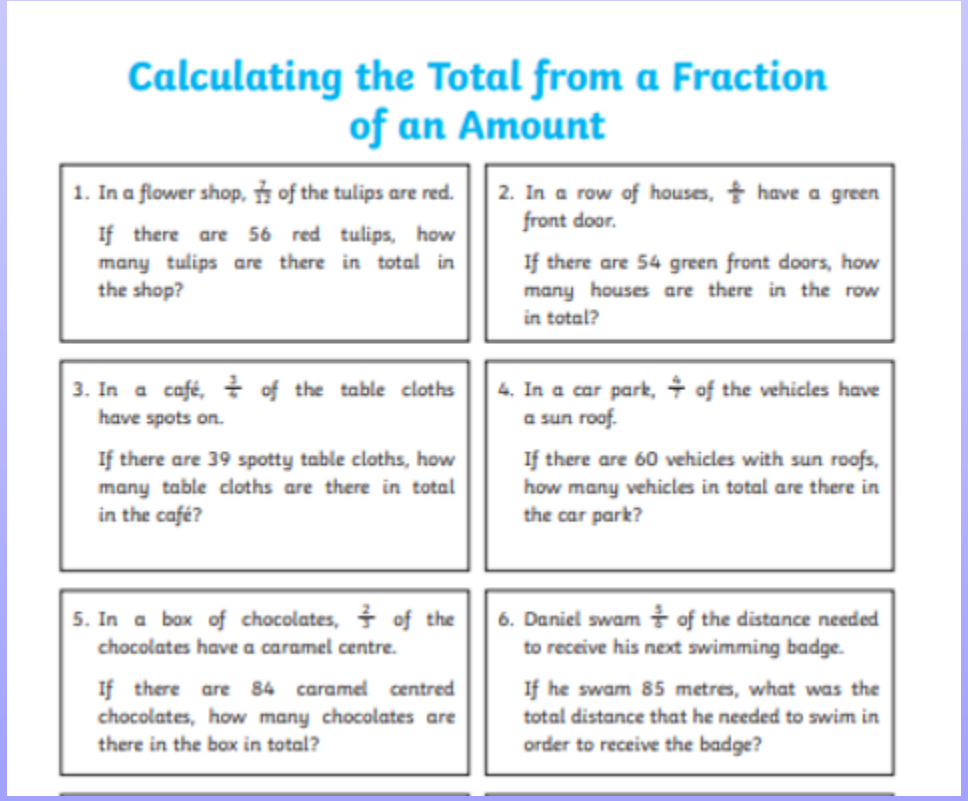
If there are 39 spotty table cloths, how many table cloths are there in total in the café?

$\frac{3}{4}$ = 39



# Your turn

Choose your challenge starting p4 of your Home Learning Booklets.
1st set- Mild
2nd set- Warm-
3rd set- HOT HOT HOT



## Calculating the Total from a Fraction of an Amount

1. In a flower shop, $\frac{7}{11}$ of the tulips are red.
   If there are 56 red tulips, how many tulips are there in total in the shop?

2. In a row of houses, $\frac{6}{9}$ have a green front door.
   If there are 54 green front doors, how many houses are there in the row in total?

3. In a café, $\frac{3}{4}$ of the table cloths have spots on.
   If there are 39 spotty table cloths, how many table cloths are there in total in the café?

4. In a car park, $\frac{5}{7}$ of the vehicles have a sun roof.
   If there are 60 vehicles with sun roofs, how many vehicles in total are there in the car park?

5. In a box of chocolates, $\frac{2}{5}$ of the chocolates have a caramel centre.
   If there are 84 caramel centred chocolates, how many chocolates are there in the box in total?

6. Daniel swam $\frac{3}{6}$ of the distance needed to receive his next swimming badge.
   If he swam 85 metres, what was the total distance that he needed to swim in order to receive the badge?

**Remember the steps:**
**Divide by the NUMERATOR**
**Multiply by the DENOMINATOR**