Week 5 Maths
Fractions

If something is split into tenths, how many equal pieces is it split into?

It is split into ten equal pieces.

Tenths can also be represented as decimals. For example:

4/10 = 0.4

7/10 = 0.7

23.3.20

LO: To represent fractions on a number line

Remember to write the date and LO into your home school book.

Success criteria:

I know what the denominator does

I know what the numerator does

I can find a fraction of an amount

In a distant place called fractions land there lives a sweet princess called princess numerator but there is also a monster called the demon denominator!

The demon denominator is horrible and goes around breaking innocent numbers and objects into pieces! However, Princess numerator goes around saving as many as she can!

Fractions show us how many pieces the demon denominator has broken something into as well a showing us how many the princess has saved.

Fractions show us how many pieces the demon denominator has broken something into as well a showing us how many the princess has saved.

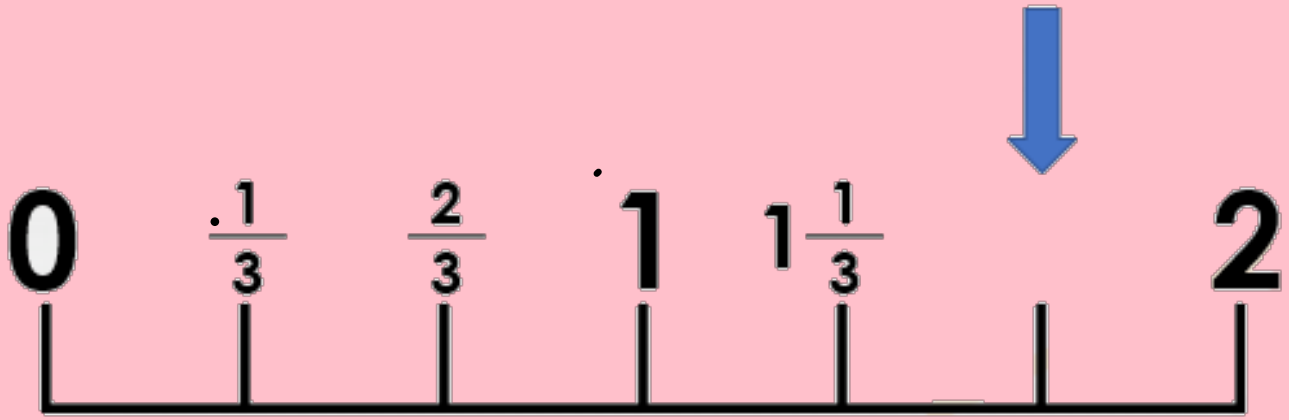
$$\frac{6}{20}$$

numerator (number of parts we have)

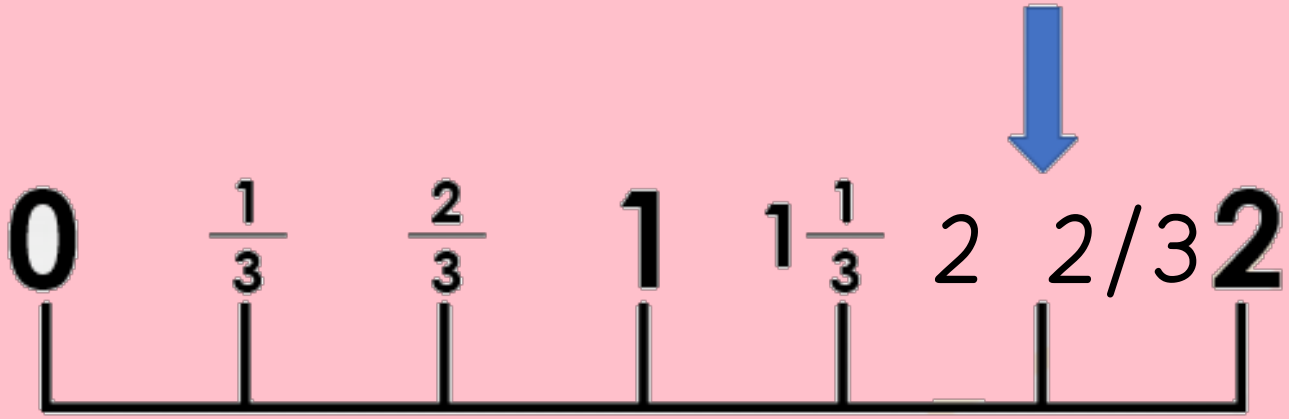
denominator (number of parts in total)

Just like with whole numbers, we can put fractions on a number line.

What fraction is the arrow pointing to on this number line?

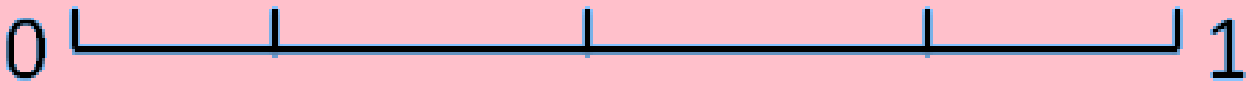


What fraction is the arrow pointing to on this number line?

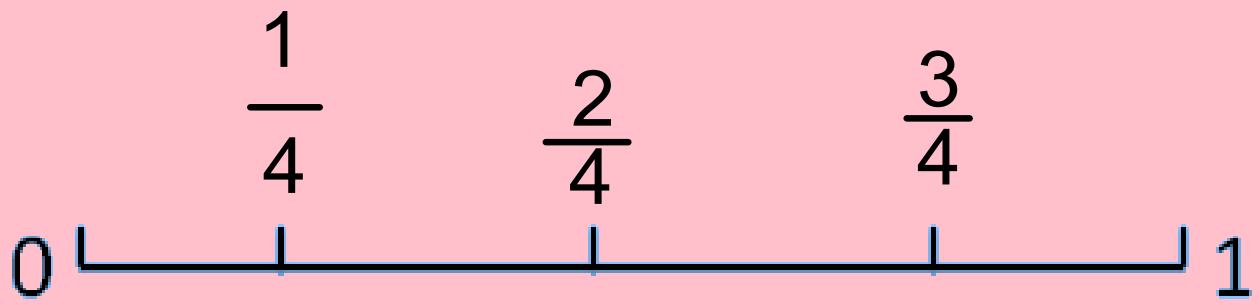


Put these fractions into the correct order.

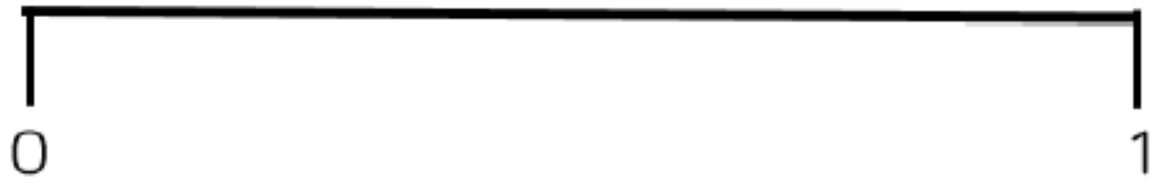
$\frac{2}{4}$ $\frac{1}{4}$ $\frac{3}{4}$



Check your answers.....



Split the number line into eighths.
Can you label each division of the number line?



Check your answers...

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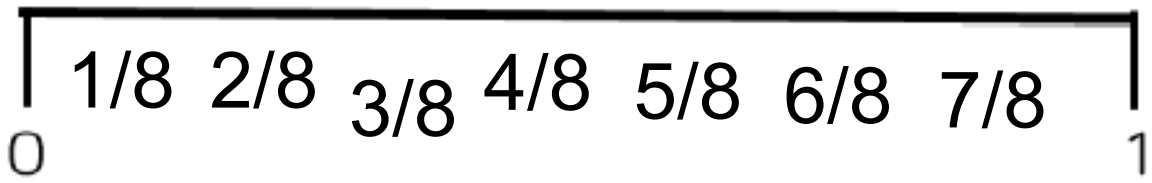


Pick a challenge and draw number lines for each question and label the following.

Hard

1. 0.1 and 0.9
2. 0 and 0.6
3. 0.1, 0.4 and 0.7
4. 0.2, 0.5 and 0.8
5. 0.3, 0.5 and 7/10
6. Draw a bar and shade in 0.3 of the shape
7. Draw a bar and shade in 0.7 of the shape

Harder

1. 0.1 and 0.9
2. 0 and 6/10
3. 0.1, 4/10 and 0.7
4. 0.2, 6/10 and 0.8
5. 0.3, 4/10 and 7/10
6. Draw a bar and shade in 0.3 of the shape
7. Draw a bar and shade in 0.7 of the shape

Extra challenge

Alex and Joanne are counting up and down in thirds.

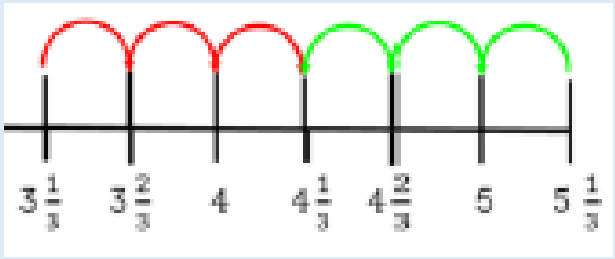
Alex starts at $5\frac{1}{3}$ and counts backwards.

Joanne starts at $3\frac{1}{3}$ and counts forwards.

What fraction will they get to at the same time?

Were you correct?

They will both land on $4\frac{1}{3}$



24.3.20

L.O. to find fractions of a quantity

Here's how to find a fraction of a quantity....

Divide your whole quantity by the denominator to find one part.

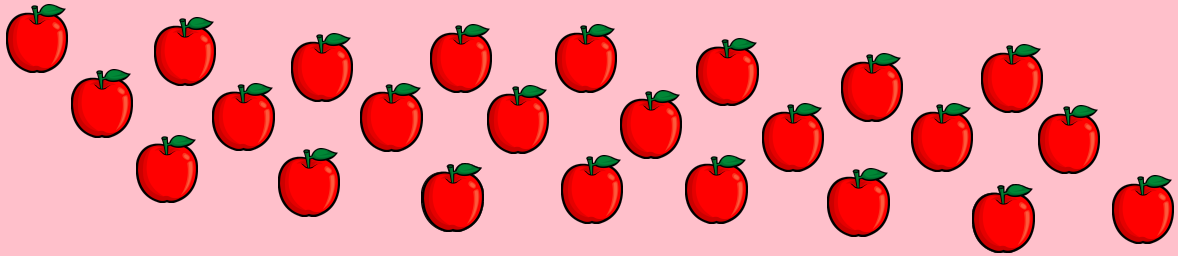
$\frac{1}{2}$ of 24

Then times your answer by the numerator as that is how many parts you want to find.

Tim has 24 apples.

Have a go at finding the below fractions

$\frac{1}{2}$ of 24 $\frac{1}{4}$ of 24 $\frac{1}{3}$ of 24 $\frac{1}{6}$ of 24



Check your answers

$\frac{1}{2}$ of 24 = 12

$\frac{1}{4}$ of 24 = 6

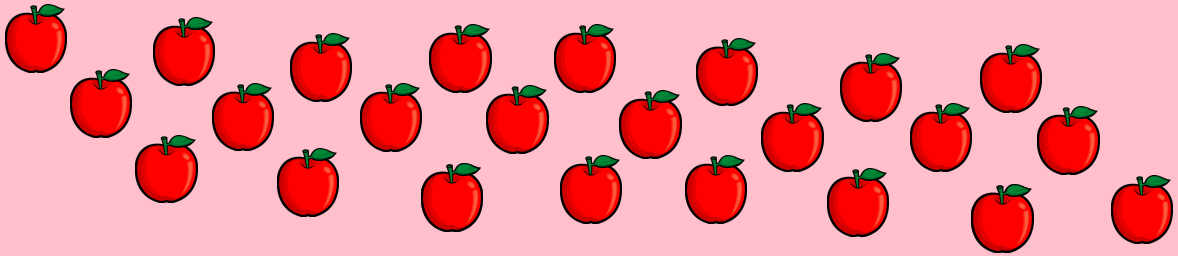
$\frac{1}{3}$ of 24 = 8

$\frac{1}{6}$ of 24 = 4

Tim has 24 apples.

How can we find these fractions using counters?

3/4 of 24 2/3 of 24 4/6 of 24



Check your answers

3/4 of 24 = 18

2/3 of 24 = 16

4/6 of 24 = 16

Match the fraction to the amount.

A. $\frac{2}{3}$ of 24

B. $\frac{3}{10}$ of 80

C. $\frac{4}{5}$ of 35

D. $\frac{3}{4}$ of 48

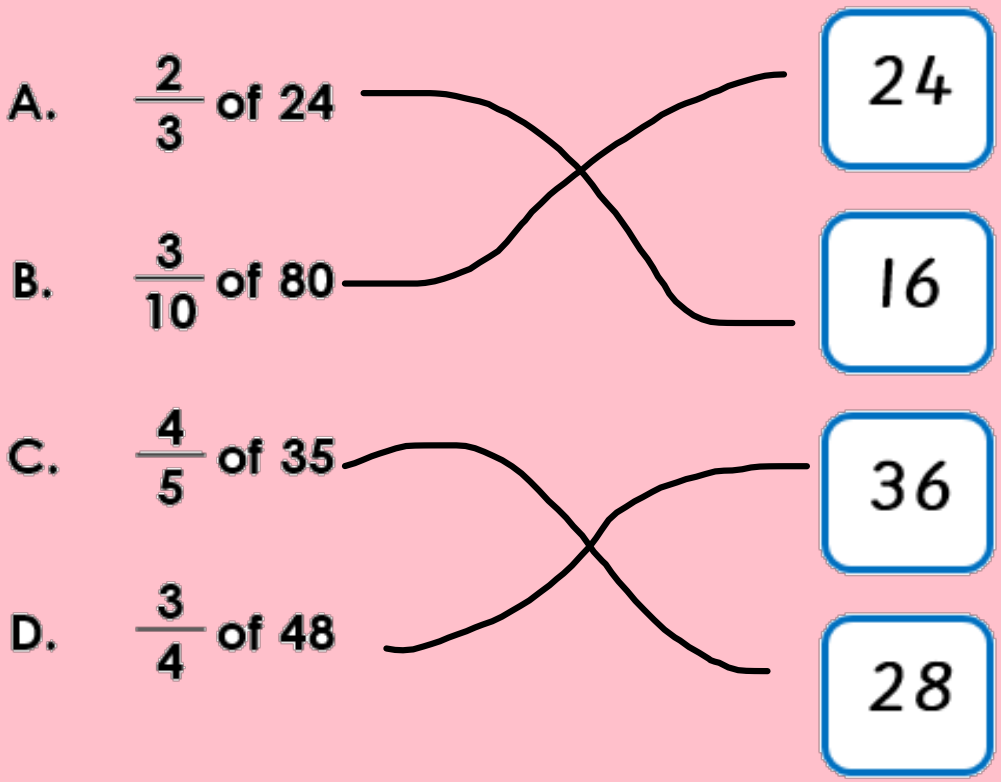
24

16

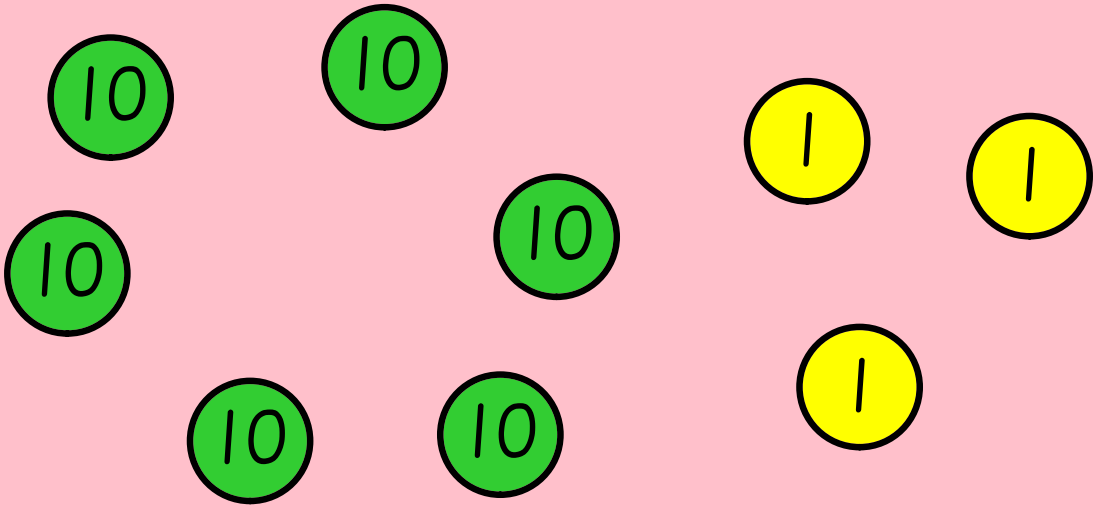
36

28

Match the fraction to the amount.



Find two thirds of the following amount.



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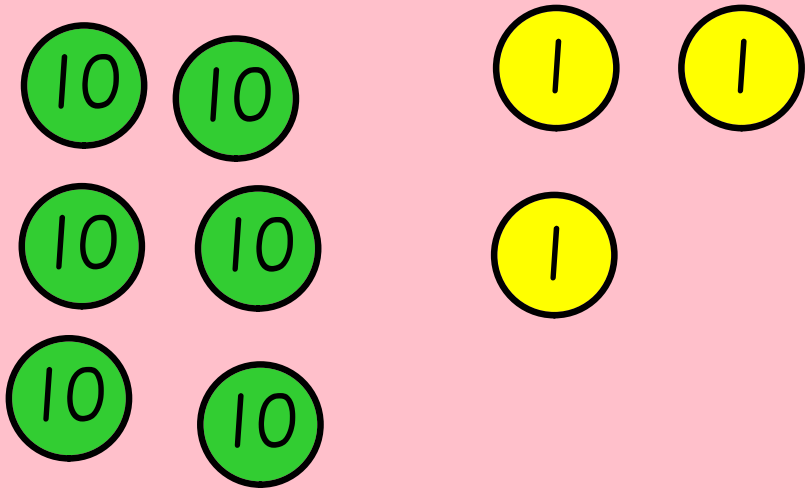


= 63

2/3 of 63 = 42

24.3.20

L.O. To find fractions of a quantity

Find the fractions of the quantities

Hard

1/4 of 28

1/3 of 36

1/6 of 18

2/3 of 24

1/8 of 32

3/4 of 20

Harder

2/8 of 48

3/4 of 24

2/3 of 45

3/8 of 72

3/4 of 56

3/8 of 104

The answers.

Hard

1/4 of 28 = 7

1/3 of 36 = 12

1/6 of 18 = 3

2/3 of 24 = 16

1/8 of 32 = 4

3/4 of 20 = 15

Harder

2/8 of 48 = 12

3/4 of 24 = 18

2/3 of 45 = 30

3/8 of 72 = 27

3/4 of 56 = 42

3/8 of 104 = 39

25.3.20

L.O. to find fractions of a quantity

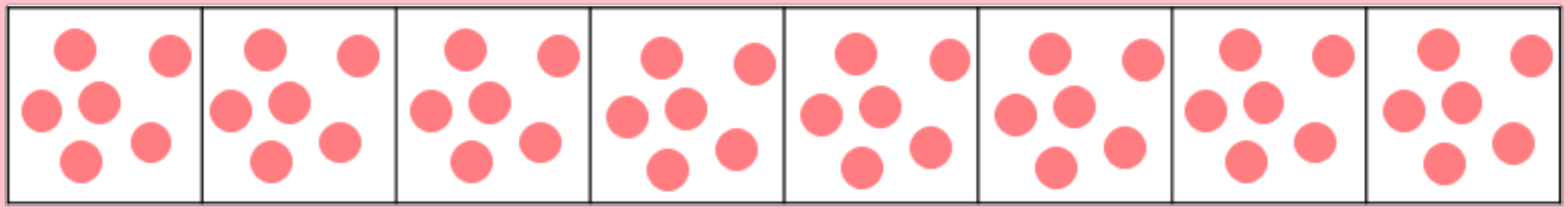
Recap- to find a fraction of a quantity, you need to:

Divide your whole quantiy by the denominator to find one part.

$$\times \quad \frac{1}{2} \text{ of } 24 \quad \div$$

Then times your answer by the numerator as that is how many parts you want to find.

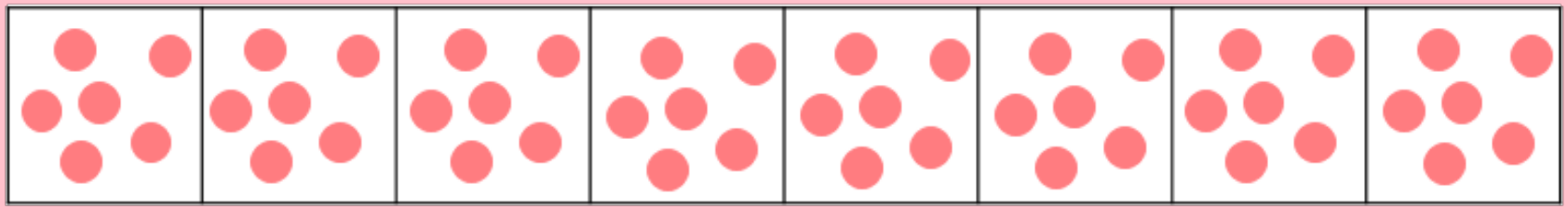
Circle the number that is $\frac{5}{8}$ of the whole number represented below.



30 6 48

What is the whole?

Circle the number that is $\frac{5}{8}$ of the whole number represented below.



30 6 48

What is the whole?

=48

$\frac{2}{4}$ of 16

$\frac{3}{6}$ of 24 =

$\frac{3}{6}$ of 24 =

$\frac{2}{4}$ of 16 = 8

$\frac{3}{6}$ of 24 = 12

$\frac{3}{8}$ of 72 = 27

True or false?

5/7 of 49 is 7

Explain how you know.

True or false?

5/7 of 49 is 7

Explain how you know.

False it equals 35

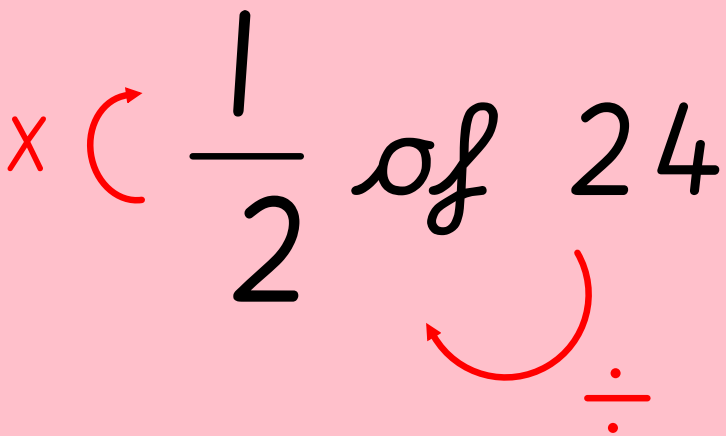
Task: Mathletics Fractions of a collection One and Two.

26.3.20

L.O. to find fractions of a quantity

Remember, to find a fraction of a quantity you must:

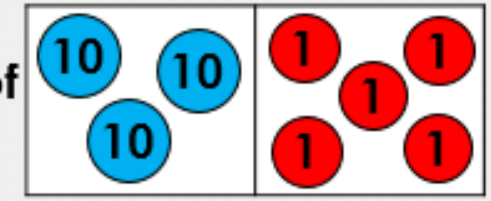
Divide your whole quantity by the denominator to find one part.



Then times your answer by the numerator as that is how many parts you want to find.

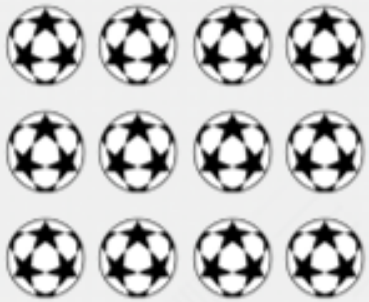
Use your knowledge of fractions to solve the following problems. The answers to each question are on the following slide.

Match the fraction to the answer.

$\frac{2}{5}$ of 

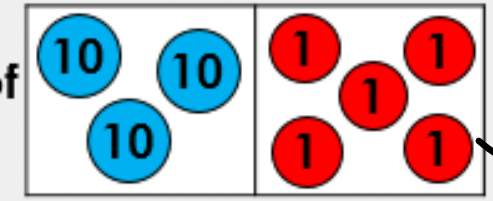
$\frac{1}{8}$ of sixteen

$\frac{3}{4}$ of 24

$\frac{2}{3}$ of 

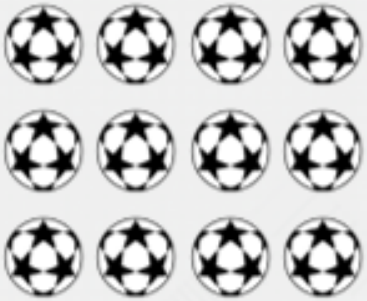
18
8
two
14

Match the fraction to the answer.

$\frac{2}{5}$ of 

$\frac{1}{8}$ of sixteen

$\frac{3}{4}$ of 24

$\frac{2}{3}$ of 

18

8

two

14

Tara is completing a 60km journey.

She stops after $\frac{4}{10}$ of her journey.

She has driven 40km. True or false?

Tara is completing a 60km journey.

She stops after $\frac{4}{10}$ of her journey.

She has driven 40km. True or false?

False. Tara has driven 24km.

1/10 = 6km

6km X 4 = 24km

4/10 = 24km

Add >, < or = to make the equation correct.

$\frac{3}{4}$ of 20m $\square$ $\frac{3}{5}$ of 20m

Add >, < or = to make the equation correct.

$\frac{3}{4}$ of 20m $\boxed{>}$ $\frac{3}{5}$ of 20m

Each child throws a ball on a court 24m long.
Tara thinks she threw the ball the farthest.

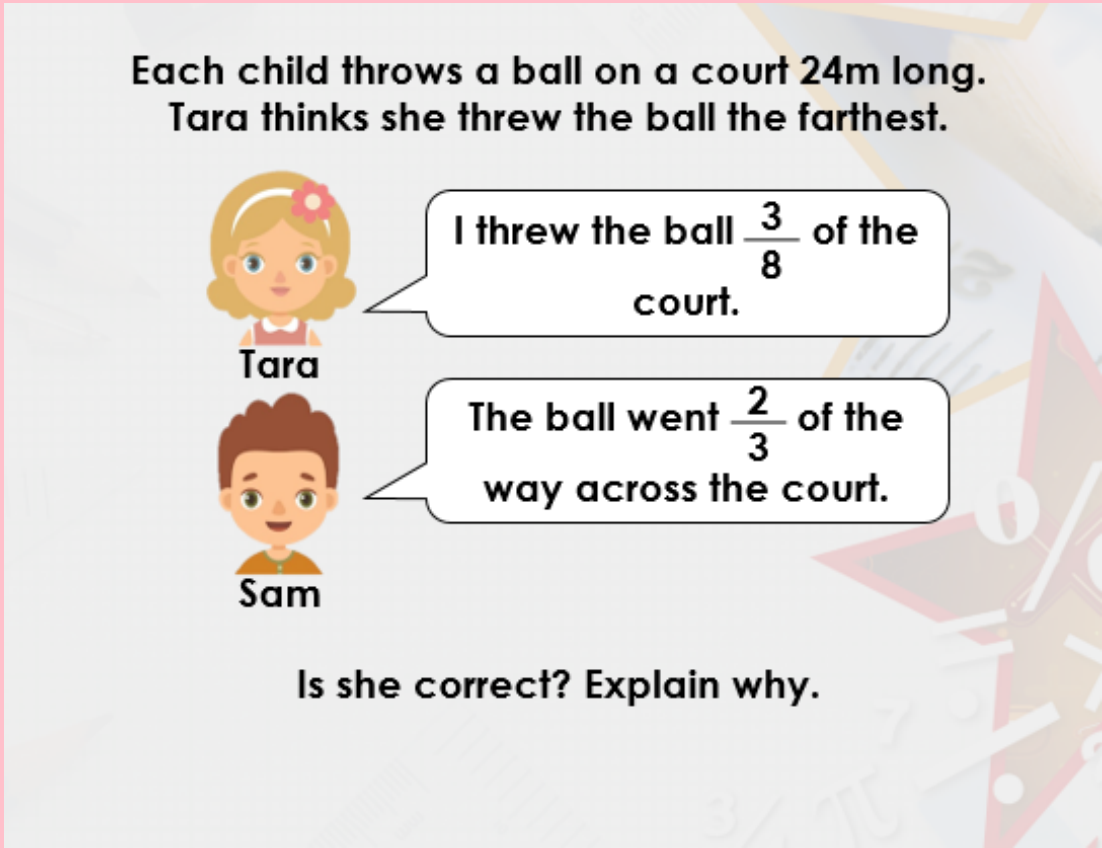
Tara

I threw the ball $\frac{3}{8}$ of the court.

Sam

The ball went $\frac{2}{3}$ of the way across the court.

Is she correct? Explain why.



3/8 of 24 = 9

2/3 of 24 = 16

Tara is incorrect. She threw the ball 9m and Sam threw the ball 16m.

Tesco normally sell ham sandwiches £2.40. The shopkeeper says I can buy them for 1/4 less than the normal price. How much will I pay for the ham sandwich?

Tesco normally sell ham sandwiches £2.40. The shopkeeper says I can buy them for 1/4 less than the normal price. How much will I pay for the ham sandwich?

1/4 of £2.40 is 60p

£2.40 - 60p = £1.80

Kayleigh has 12 chocolates.

On Friday, she ate $\frac{1}{4}$ of her chocolates and gave one to her mum.

On Saturday, she ate $\frac{1}{2}$ of her remaining chocolates, and gave one to her brother.

On Sunday, she ate $\frac{1}{3}$ of her remaining chocolates.

How many chocolates does Kayleigh have left?

Kayleigh has 12 chocolates.

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How many chocolates does Kayleigh have left?

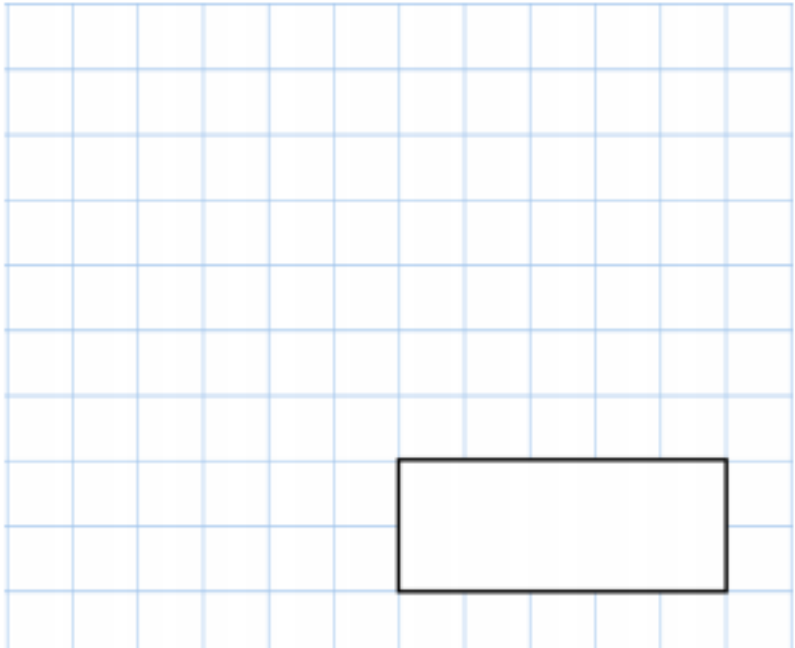
Kayleigh has two chocolates left.

27.3.20

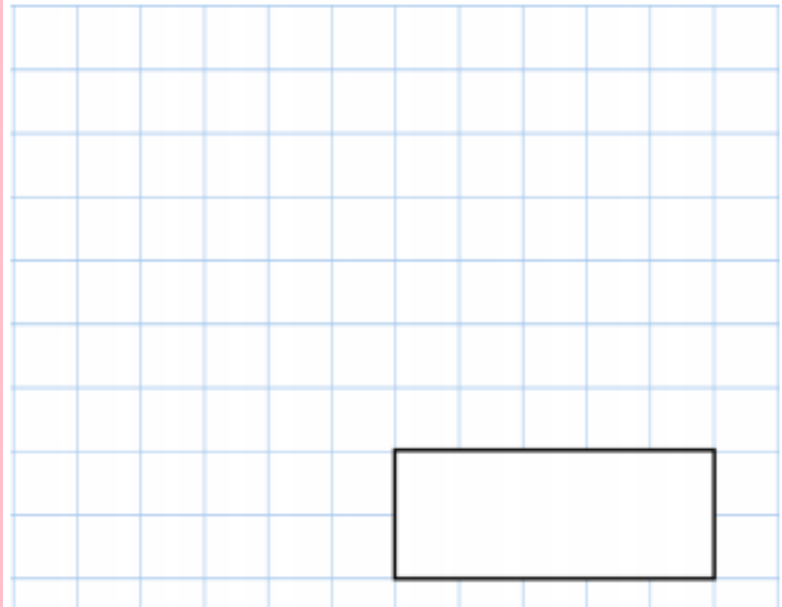
LO: To develop mental maths skills

Write the answers to each of the following 5 a day questions in your books then check your answers.

$505 - 20$



8×7

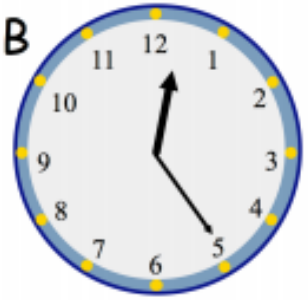


Which clock face shows
five past twelve?

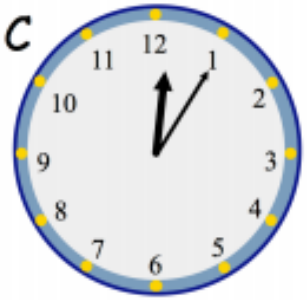
Which clock face shows
five o'clock?

A

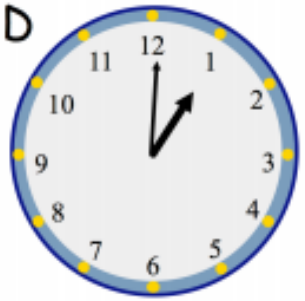
B



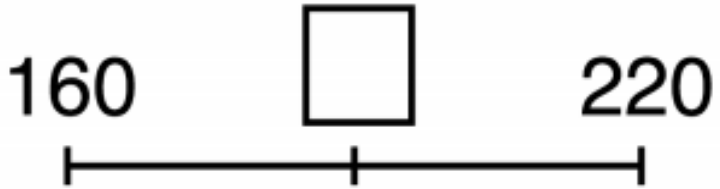
C

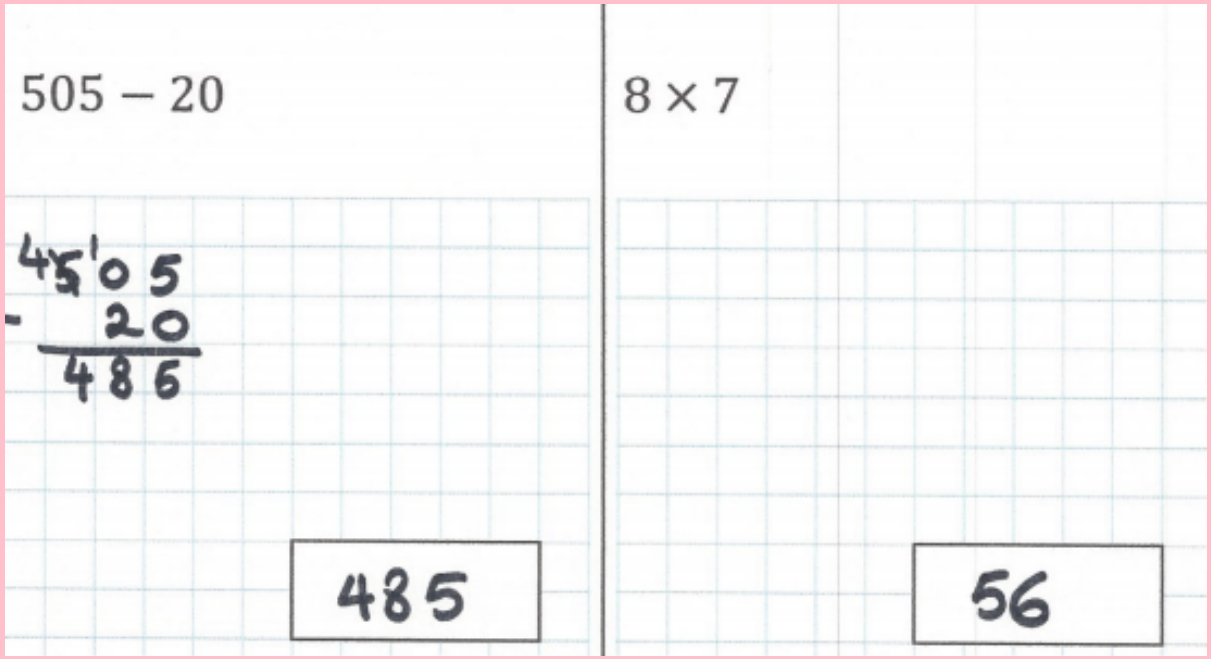


D



Which number comes **halfway** between **160** and **220**





$505 - 20$

$$\begin{array}{r} {}^{4}\cancel{5}{}^{1}05 \\ -\ \ 20 \\ \hline 485 \end{array}$$

$\boxed{485}$

8×7

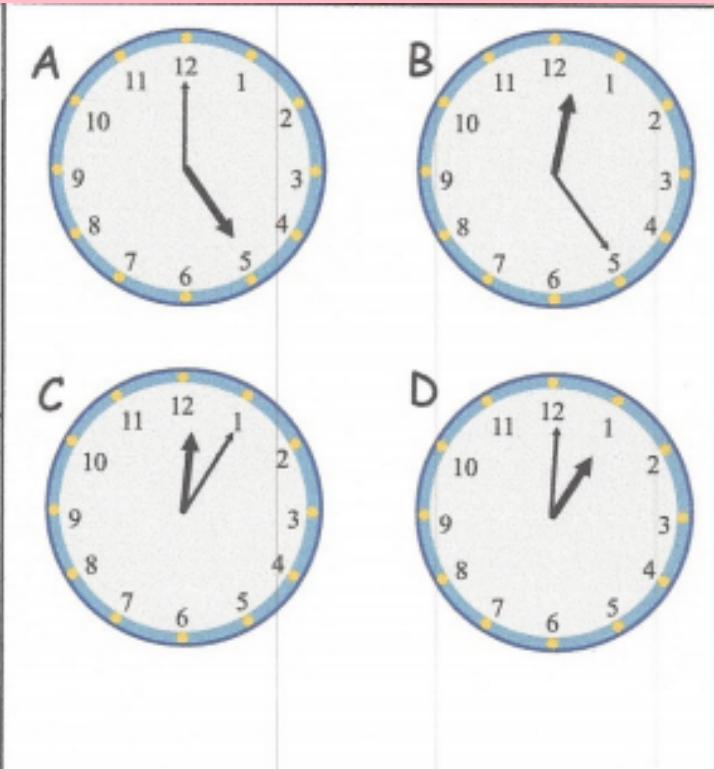
$\boxed{56}$

Which clock face shows
five past twelve?

C

Which clock face shows
five o'clock?

A

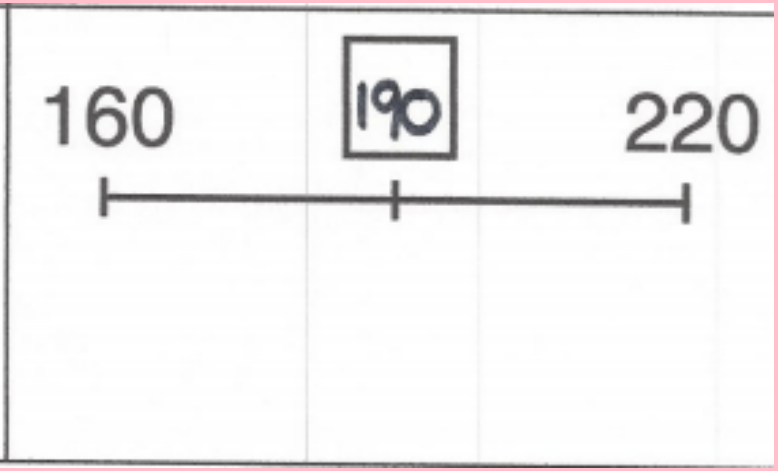


Which number comes **halfway** between **160** and **220**

$220 - 160 = 60$

$\frac{1}{2}$ of $60 = 30$

$160 + 30 = 190$



Now, visit hit the button and practice your times tables and number bonds.

https://www.topmarks.co.uk/maths-games/hit-the-button