What is a Fraction?

2 minute challenge
How many mathematical words can you think of in 2 minutes?

Fractions

Number & Operations - Fractions Vocabulary

denominator - the part a fraction that is written below (or to the right) of the line and stands for the total number of parts in the whole

equal parts - parts that have the same portion, piece or segment of a whole

equivalent - things having the same value

equivalent fractions - fractions that have the same value even though they make look different (Ex: 1/3 = 3/9)

fraction – part of a whole

numerator - the part of a fraction that is written above (or to the left) of the line and stands for a part of the whole
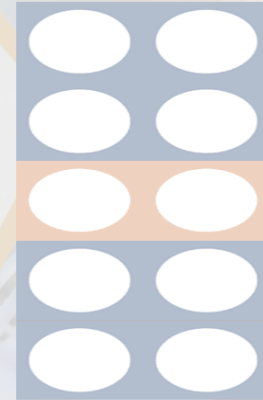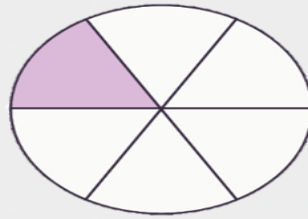
part - a piece or only some of something

quantity - the amount or number of something

whole - all of something; complete

Circle the images which represent $\frac{1}{6}$.

The top number in a fraction.

Shows how many parts we have.

(The bottom number is the Denominator and shows how many equal parts the item is divided into.)
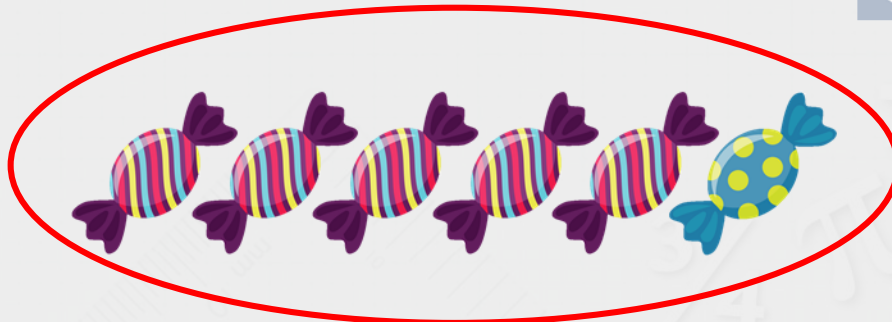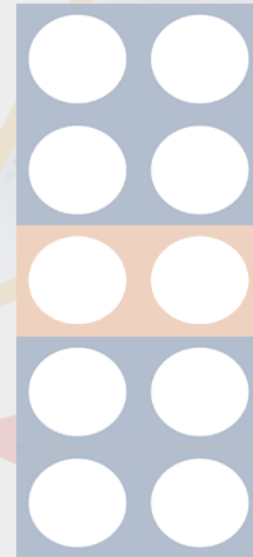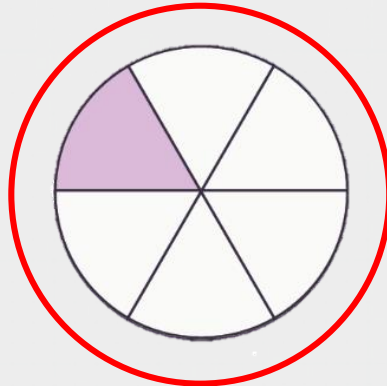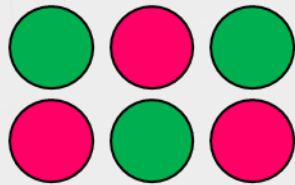
$$\frac{3}{4}$$ ← Numerator
← Denominator

Circle the images which represent $\frac{1}{6}$.

Circle the unit fractions.

Unit fraction: A **unit fraction** is a **fraction** where the numerator (top number) is 1 and the denominator (bottom number) is a whole number.
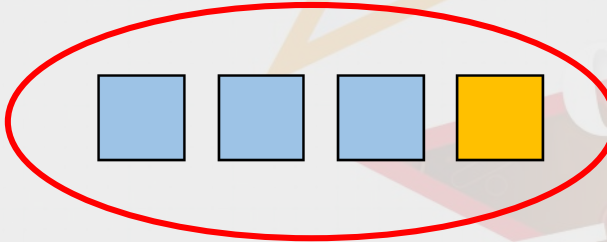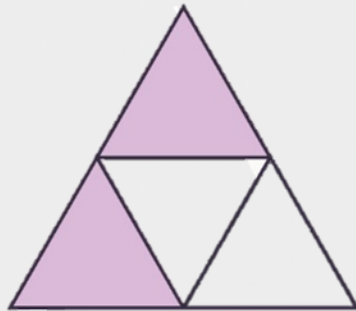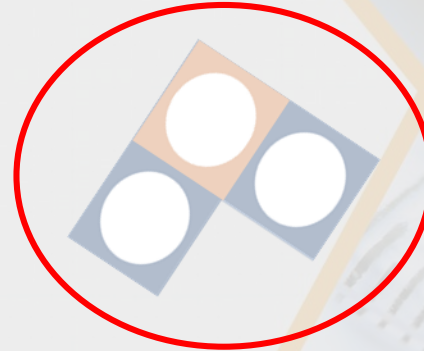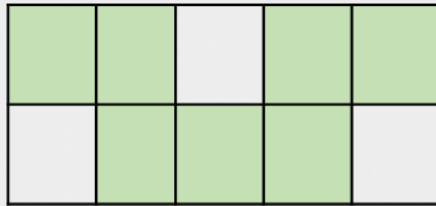
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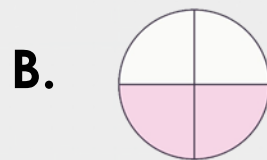
Match the fraction to the correct representation.

$$\frac{1}{5}$$

A.

$$\frac{3}{4}$$
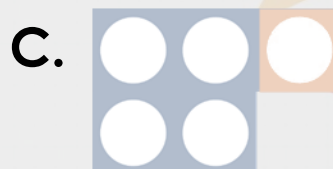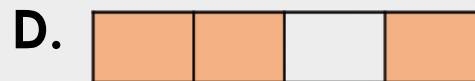
B.

$$\frac{4}{7}$$

C.

$$\frac{2}{4}$$

D.

The top number in a fraction.

Shows how many parts we have.

(The bottom number is the Denominator and shows how many equal parts the item is divided into.)

$\frac{3}{4}$ ← Numerator
← Denominator

Top Tip

Match the fraction to the correct representation.

$$\frac{1}{5}$$

$$\frac{3}{4}$$
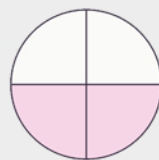
$$\frac{4}{7}$$

$$\frac{2}{4}$$

A.

B.

C.

D.

Place the following fractions on the number line below.
Follow along with me using paper. Just like we would in class.

$$\frac{4}{12} \qquad \frac{11}{12} \qquad \frac{2}{12} \qquad \frac{6}{12}$$

0   1

Step 1: Count how many sections the line has been broken into.

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$$\frac{4}{12} \qquad \frac{11}{12} \qquad \frac{2}{12} \qquad \frac{6}{12}$$

0   1

Step 1: Count how many sections the line has been broken into.

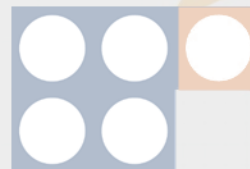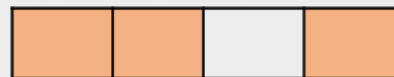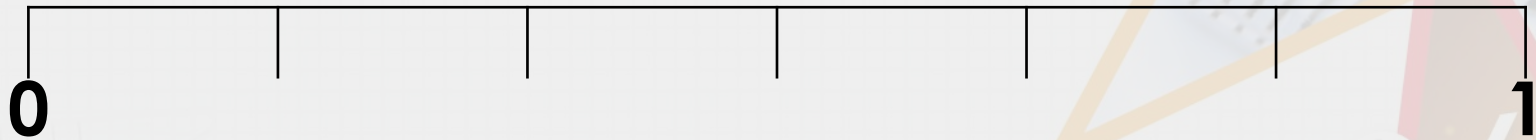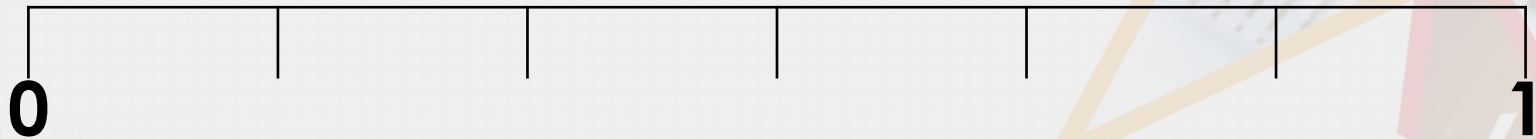Step 2: It's 6 how can we use this to make 12 sections like the denominator?

**Place the following fractions on the number line below.
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0 ── 1

Step 1: Count how many sections the line has been broken into.
Step 2: It's 6 how can we use this to make 12 sections like the denominator?
Step 3: Using our knowledge of times tables we know 6 x 2 = 12. So we can add lines.

Place the following fractions on the number line below.
Follow along with me using paper. Just like we would in class.

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0   1

Step 1: Count how many sections the line has been broken into.
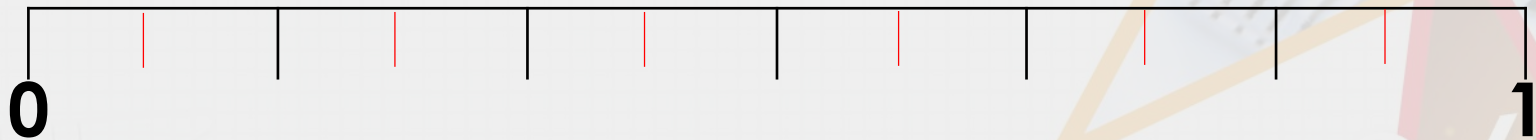Step 2: It's 6 how can we use this to make 12 sections like the denominator?
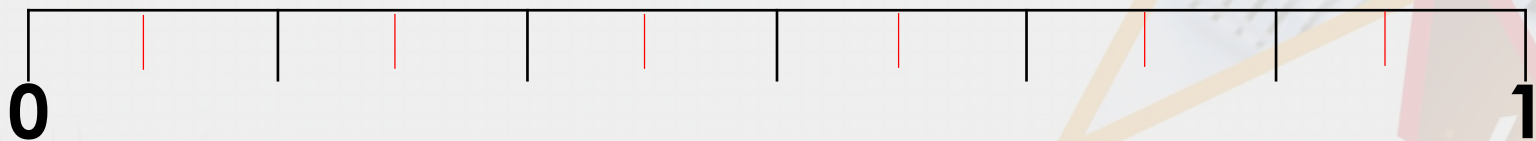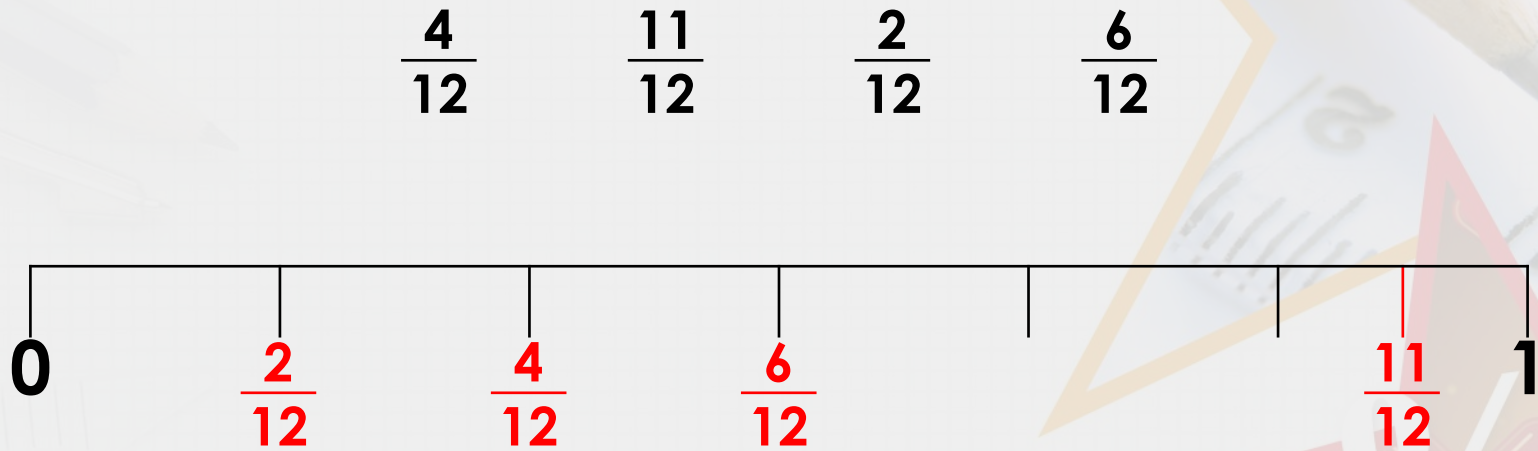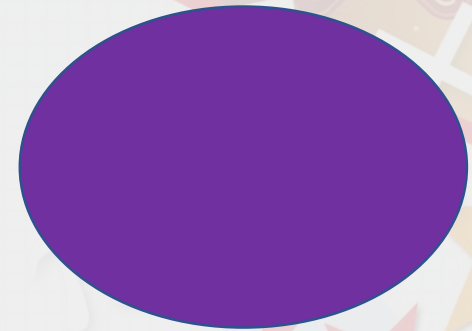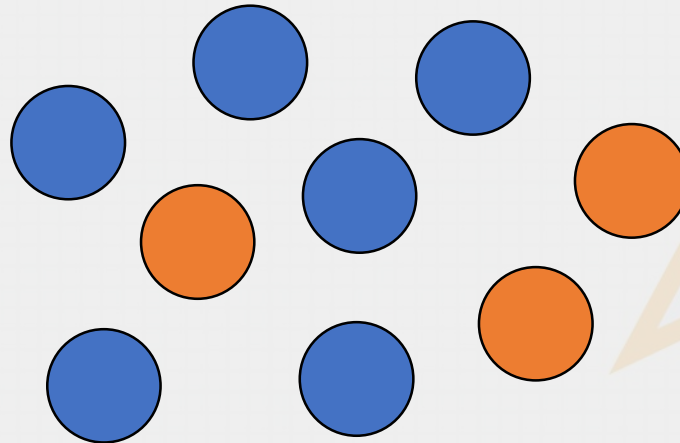Step 3: Using our knowledge of times tables we know 6 x 2 = 12. So we can add lines.
Step 4: As the denominators are all the same we can use the numerator to tell us where to place the fraction. You try it on a piece of paper
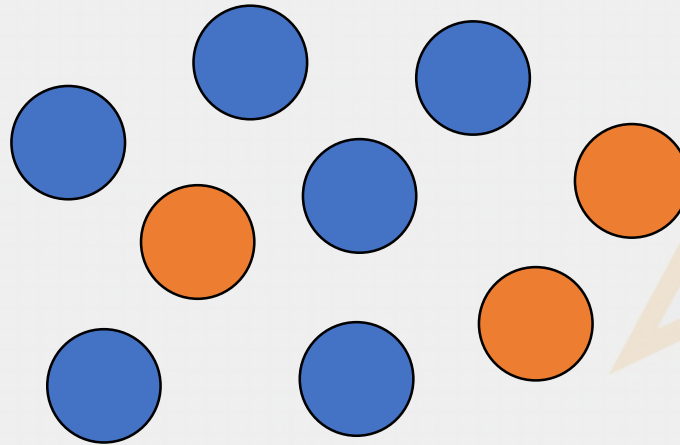
Were you right?.

$$\frac{4}{12} \qquad \frac{11}{12} \qquad \frac{2}{12} \qquad \frac{6}{12}$$

0     $\frac{2}{12}$ $\frac{4}{12}$ $\frac{6}{12}$ $\frac{11}{12}$ 1

True or false? Three eighths is show below.
2 minute challenge: Can you write the 3 steps before 1 minutes is up?

True or false? Three eighths is show below.
2 minute challenge: Can you write the 4 steps before 1 minutes is up?

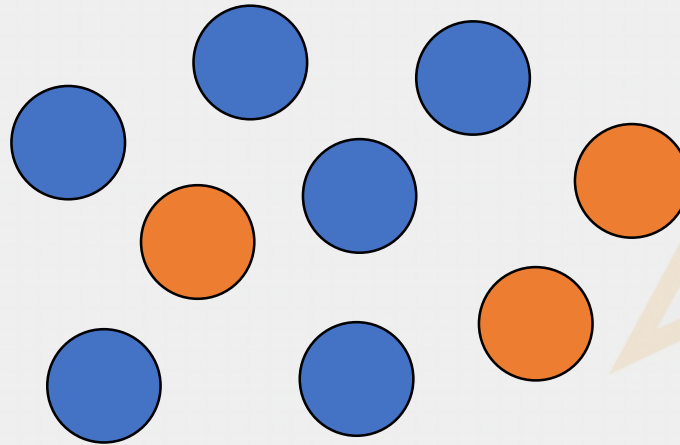Step 1: Count how many dots there are. This will give us the denominator.

Step 2: Count how are blue? This will give the numerator for 1 fraction.

Step 3: Count how are orange? This will give the numerator for another fraction.
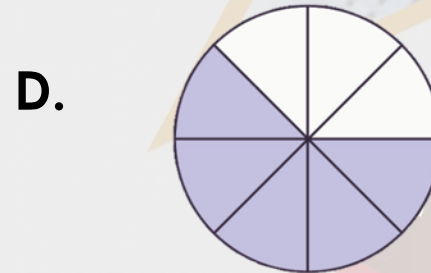
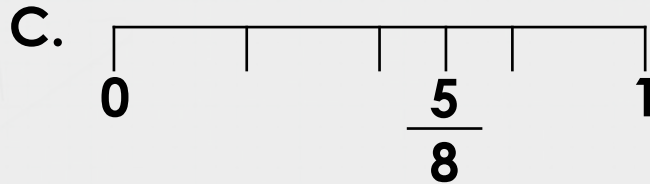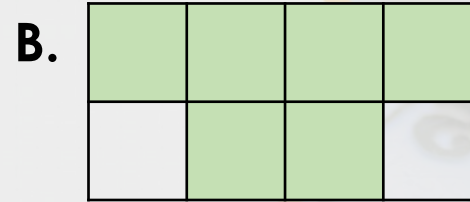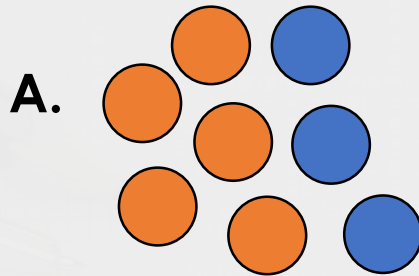Step 4: Answer the question.

True or false? Three eighths is show below.
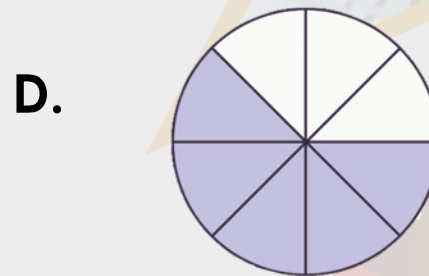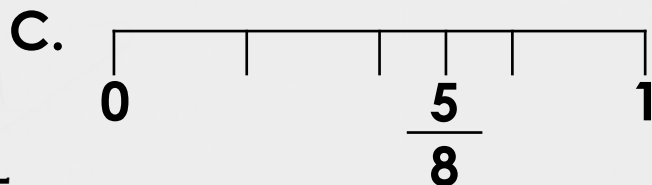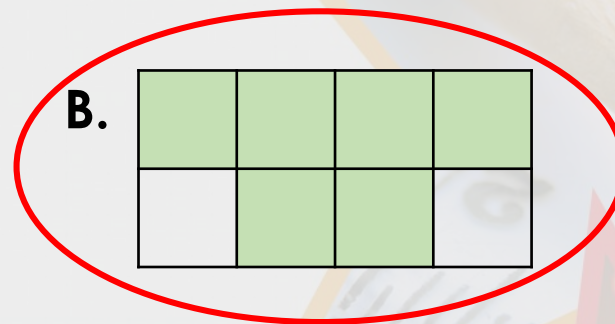

False; it shows $\dfrac{3}{9}$ or $\dfrac{6}{9}$.

Which image is the odd one out?

A.

B.

C.

0   5/8   1

D.

Look closely and follow the steps you have been practising.

Which image is the odd one out?

A.

B.

C.

0          $\frac{5}{8}$ 1

D.
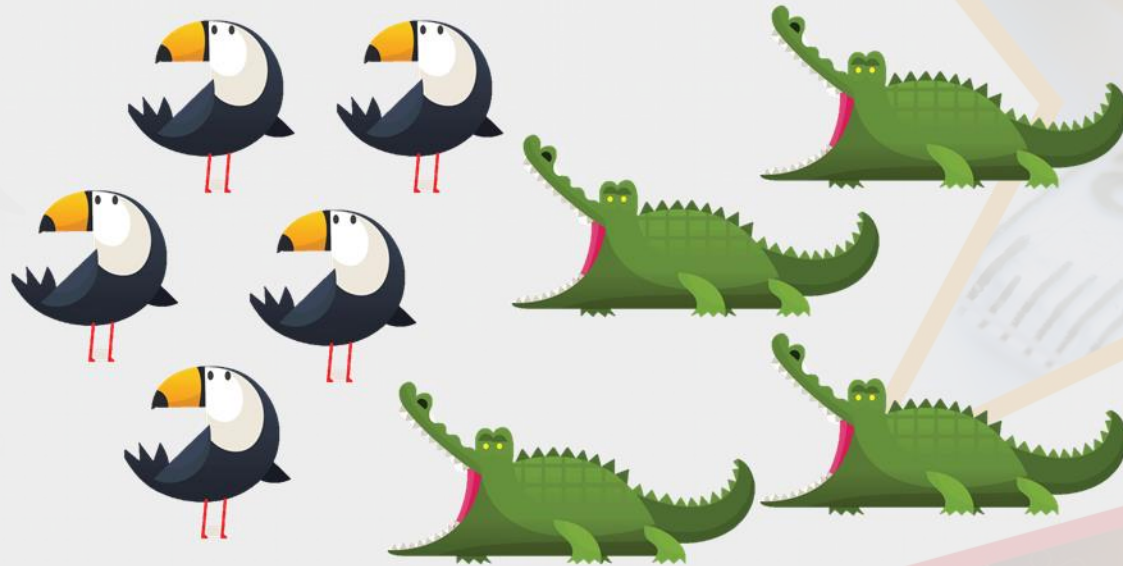
A: $\frac{3}{8}$ or: $\frac{5}{8}$

D: $\frac{5}{8}$

B:: $\frac{6}{8}$

The odd one out is B

C: $\frac{5}{8}$

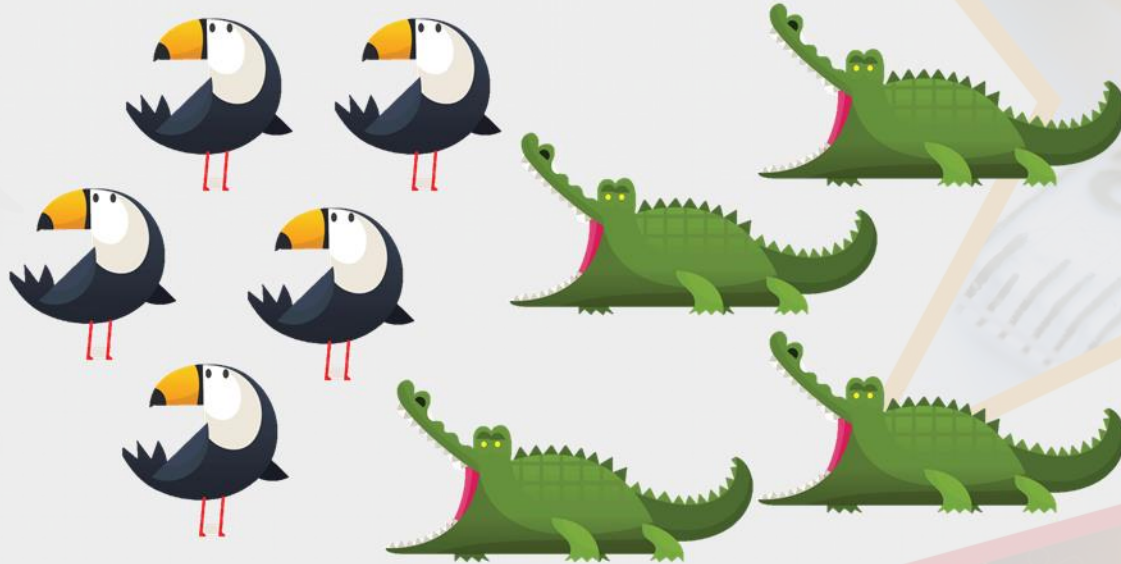Josh thinks one of the fractions being represented below is $\frac{4}{5}$.

Is he correct? Prove it.

How can we prove something?

Josh thinks one of the fractions being represented below is $\dfrac{4}{5}$.

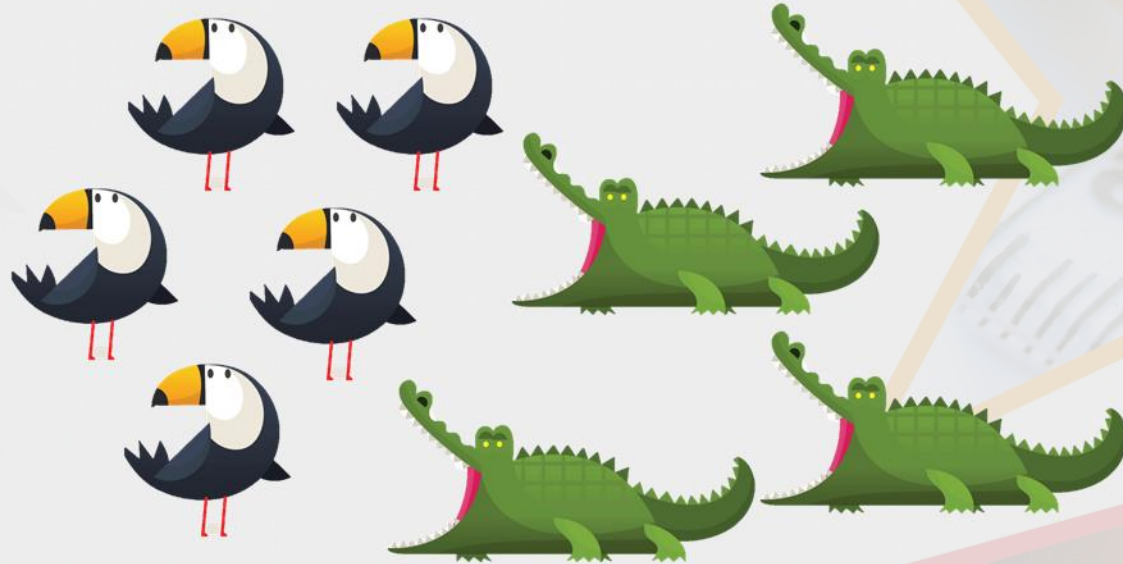## Is he correct? Prove it.

We can prove it by showing the fractions.
Your turn!

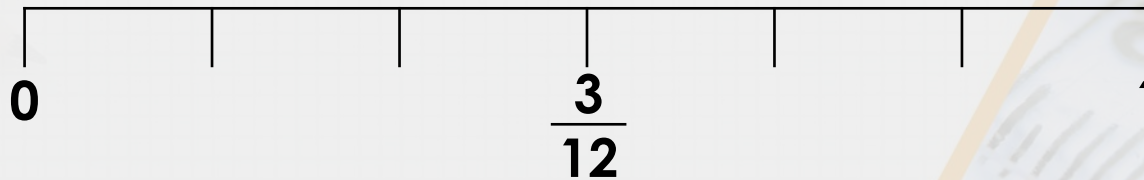Josh thinks one of the fractions being represented below is $\dfrac{4}{5}$.

Is he correct? Prove it.

Josh is incorrect because the whole is 9.

The fraction should be $\dfrac{5}{9}$ or $\dfrac{4}{9}$.

Tara has placed a fraction on the number line.

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|----|----|----|----|----|----|----|
0              3                    1
              ――
              12
```

Is she correct? Explain how you know.

Maths Vocabulary
correct
incorrect
I know this because…….
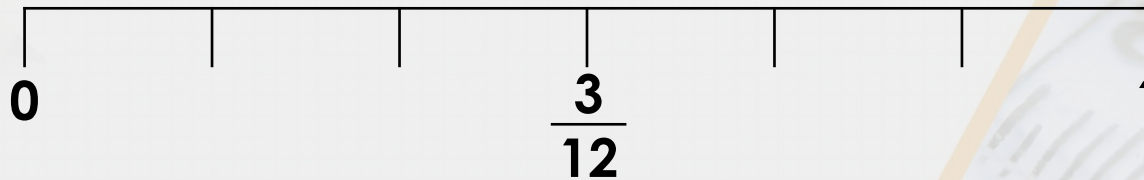fraction
denominator
numerator

Tara has placed a fraction on the number line.

0                              $\dfrac{3}{12}$ 1

Is she correct? Explain how you know.

Tara is incorrect because the <u>denominator</u> is 12 and the line is split into 6 sections. She placed the fraction in the middle of the number line which would be $\dfrac{6}{12}$.