

# Year 4 Maths



## Power Up

Work out the fractions and complete the number sentences.

$$\frac{1}{2} \text{ of } 20 = \square$$

$$\frac{1}{4} \text{ of } 20 = \square$$



$$\frac{1}{3} \text{ of } 18 = \square$$

$$\frac{1}{6} \text{ of } 18 = \square$$



$$\frac{1}{4} \text{ of } 16 = \square$$

$$\frac{1}{8} \text{ of } 16 = \square$$



Look at your answers for each pair of number sentences and compare them. Discuss them with your partner. Describe any pattern you can see.

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**LO: To recognise equivalent fractions**



Re-cap

What is a fraction?

What does the word equivalent mean?

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**LO: To recognise equivalent fractions**



Some fractions are written with different numerators and denominators but they represent the same amount of a whole.

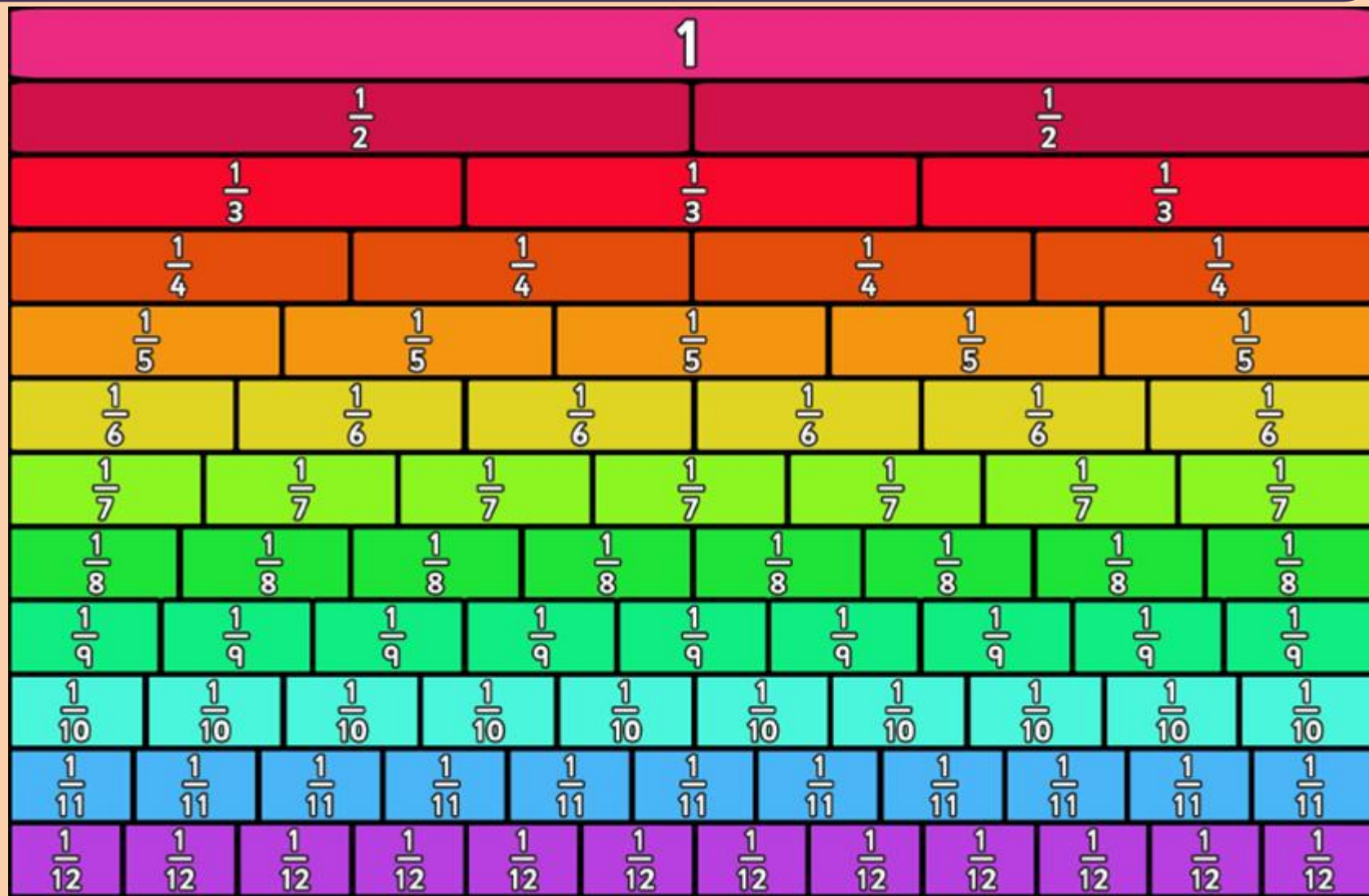
How would we write this fraction?  
What else do you notice?


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LO: To recognise equivalent fractions



How  
can  
this  
help  
you?

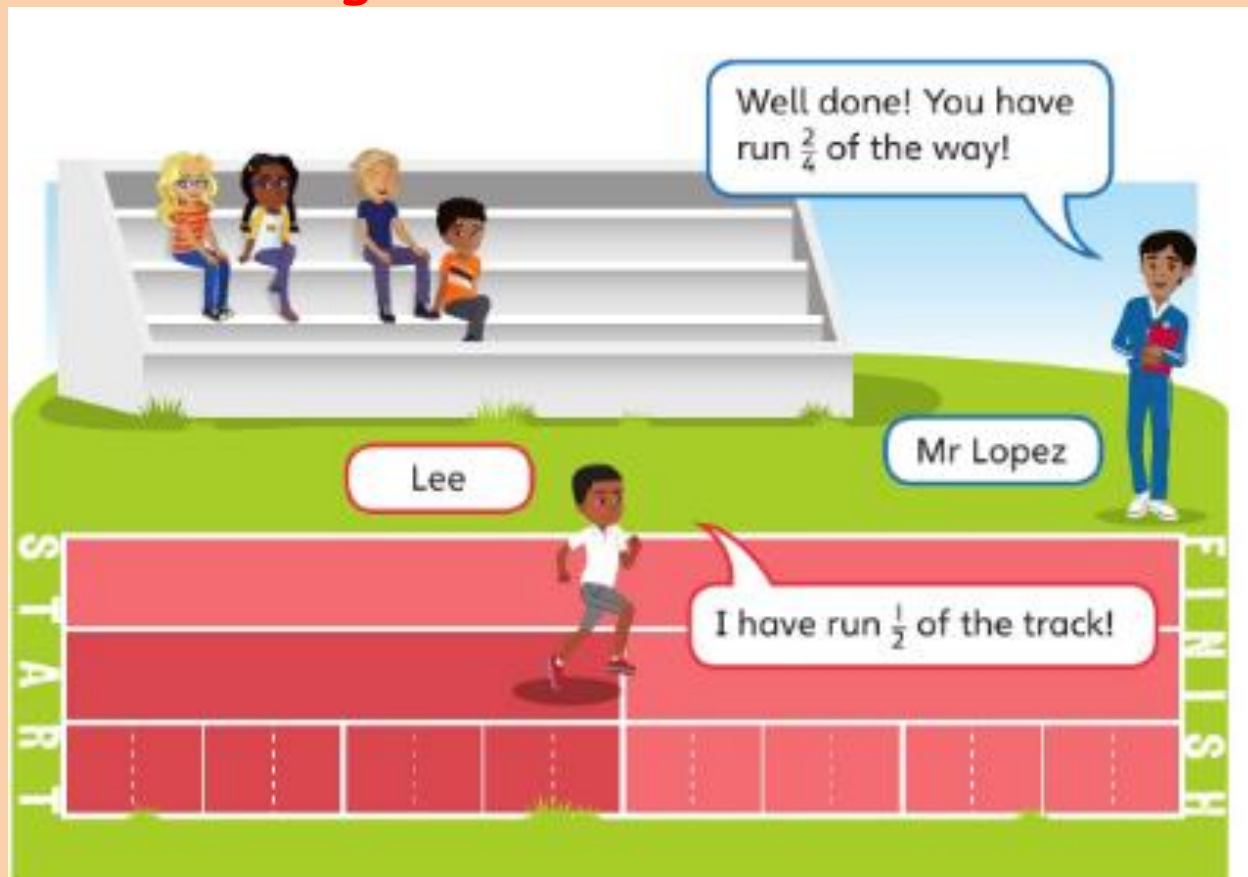


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Lets look at these together:



1 a) Who is correct, Lee or Mr Lopez?

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## LO: To recognise equivalent fractions



### Share

a)



This model represents  $\frac{1}{2}$  of the whole journey. There are 2 parts in the whole and 1 is shaded.



Look at the fractions  $\frac{1}{2}$  and  $\frac{2}{4}$ .

They have different numerators and denominators, but show the same distance.

Both Lee and Mr Lopez are correct.

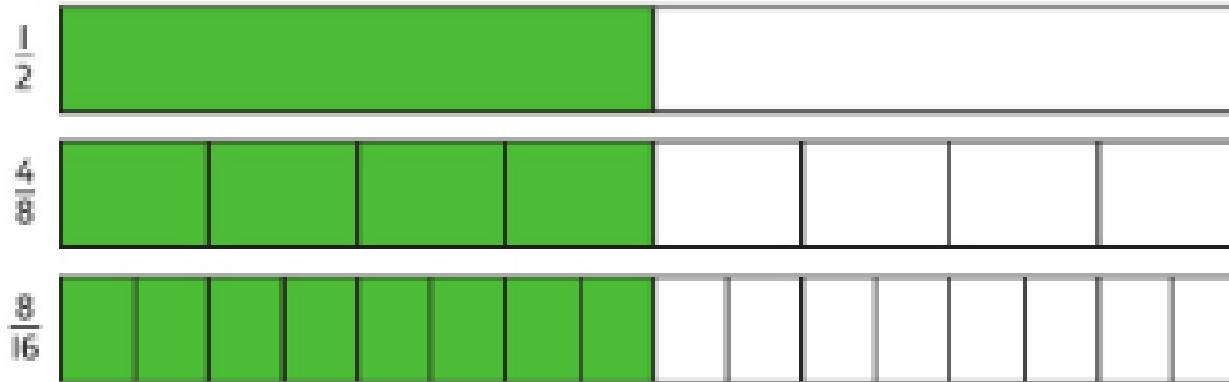
Each part is cut into 2 equal parts. Lee has run  $\frac{2}{4}$  of the journey.  $\frac{1}{2} = \frac{2}{4}$  so these are **equivalent fractions**.



Look at the lines drawn on the track. Write 2 or more fractions that are equal to  $\frac{1}{2}$ .

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LO: To recognise equivalent fractions



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

$$\frac{1}{2} = \frac{4}{8}$$

$$\frac{1}{2} = \frac{8}{16}$$

These are all equivalent fractions.

I folded a strip of paper to help me find the different fractions.



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**LO: To recognise equivalent fractions**



## Success Criteria:

- Identify the fraction of the shape that is shaded
- Match up the fractions that are the same size
- Record the equivalent fractions



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## Fluency

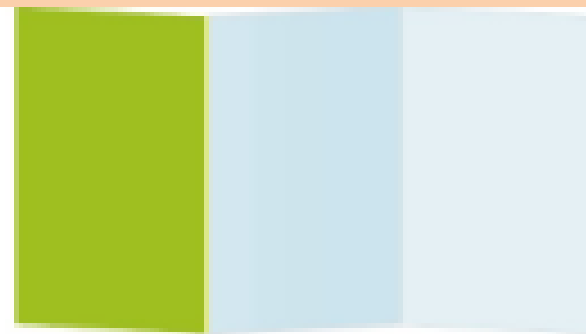
Lexi folds a paper strip into 3 equal parts.

She colours 1 of the parts.

She folds the strip in half, across the length, then unfolds it.

a) What fraction of the strip is coloured?

b) Write an equivalent fraction for this.



$$\frac{\boxed{\phantom{1}}}{3} = \frac{\boxed{\phantom{1}}}{6}$$

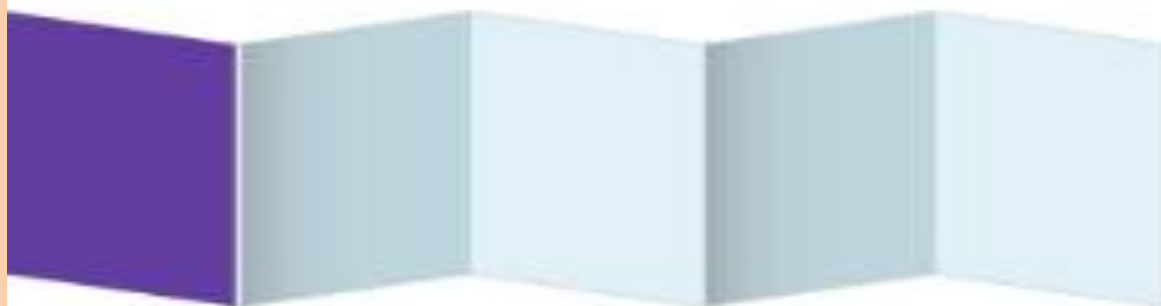
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LO: To recognise equivalent fractions



## Fluency

Jamilla has a different paper strip.  
She folds the strip into 5 equal parts.  
She colours 1 part.



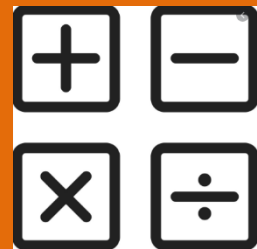
She folds the strip in half, across the length.

- a) What fraction of the strip is coloured?
- b) Write an equivalent fraction for this.

$$\frac{\square}{\square} = \frac{\square}{\square}$$

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LO: To recognise equivalent fractions

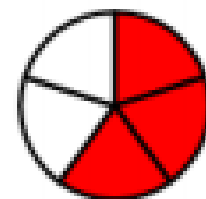
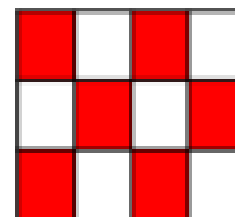
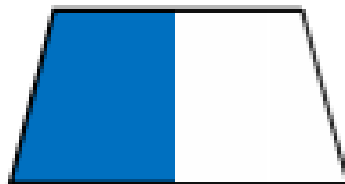


## Reasoning

Explain how the diagram shows both  $\frac{2}{3}$   
and  $\frac{4}{6}$



Which is the odd one out? Explain why



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## Problem Solving



Teddy makes this fraction:



Mo says he can make an equivalent fraction with a denominator of 9

Dora disagrees. She says it can't have a denominator of 9 because the denominator would need to be double 3



Who is correct? Who is incorrect?  
Explain why.

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## Answers - Fluency

Lexi folds a paper strip into 3 equal parts.

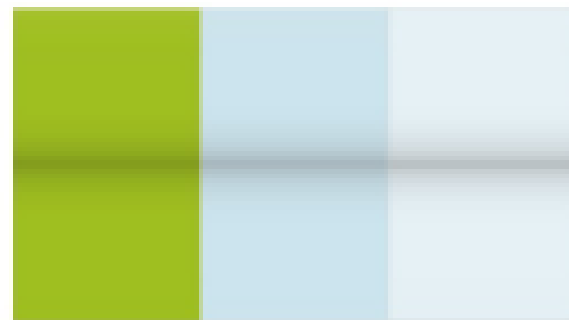
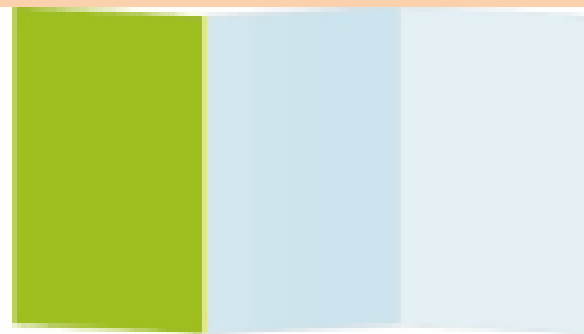
She colours 1 of the parts.

She folds the strip in half, across the length, then unfolds it.

a) What fraction of the strip is coloured?  $\frac{2}{6}$

b) Write an equivalent fraction for this.

$$\frac{1}{3} = \frac{2}{6}$$



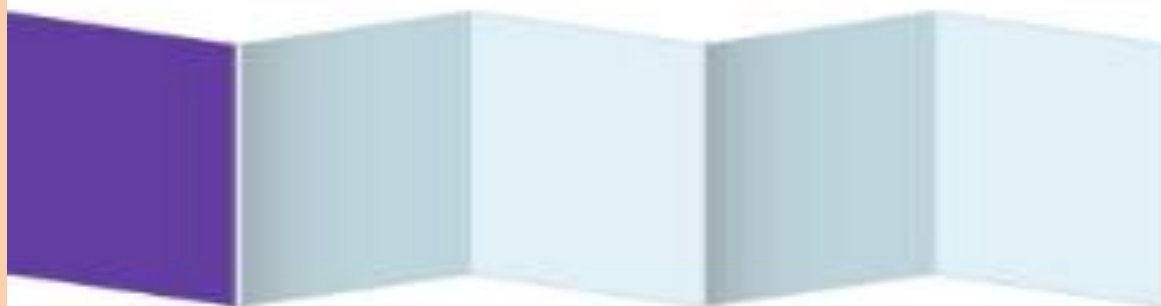
# Year 4 Maths

## LO: To recognise equivalent fractions



### Fluency

Jamilla has a different paper strip.  
She folds the strip into 5 equal parts.  
She colours 1 part.



She folds the strip in half, across the length.

- a) What fraction of the strip is coloured?
- b) Write an equivalent fraction for this.

$$\frac{1}{5} = \frac{2}{10}$$

$$\frac{2}{10}$$

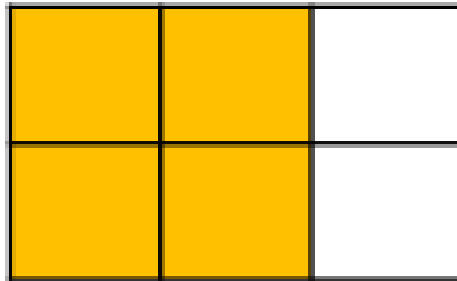
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**LO: To recognise equivalent fractions**



## Reasoning

Explain how the diagram shows both  $\frac{2}{3}$   
and  $\frac{4}{6}$



The diagram is divided into six equal parts and four out of the six are yellow. You can also see three **columns** and two columns are yellow.

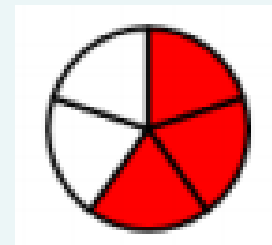
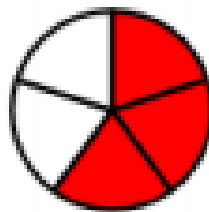
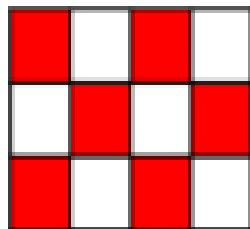
# Year 4 Maths

**LO: To recognise equivalent fractions**



## Reasoning

Which is the odd one out? Explain why

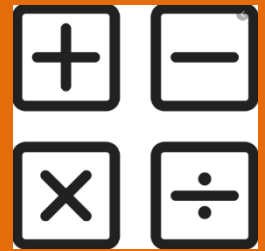


This is the odd one out because the other fractions are all equivalent to  $\frac{1}{2}$

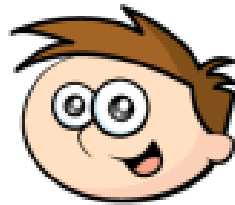


# Year 4 Maths

## LO: To recognise equivalent fractions



### Problem Solving



Teddy makes this fraction:



Mo says he can make an equivalent fraction with a denominator of 9

Mo is correct. He could make three ninths which is equivalent to one third.



Dora disagrees. She says it can't have a denominator of 9 because the denominator would need to be double 3



Dora is incorrect. She has a misconception that you can only double to find equivalent fractions.

Who is correct? Who is incorrect?  
Explain why.