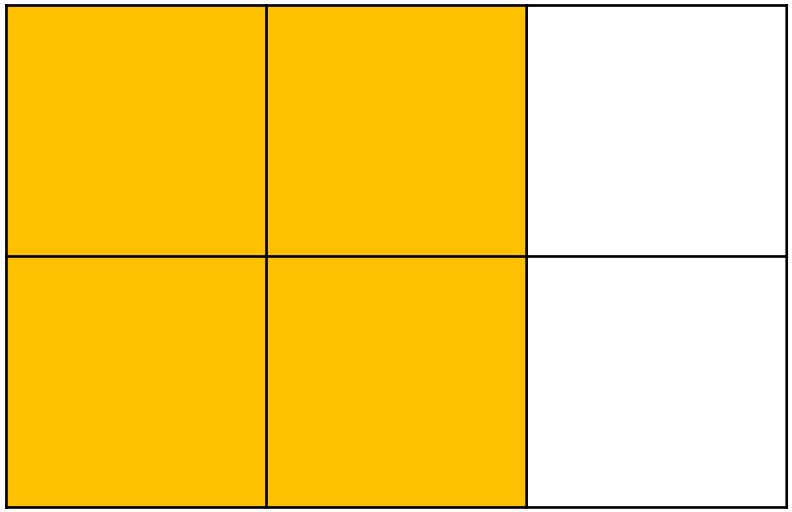
White Rose Maths

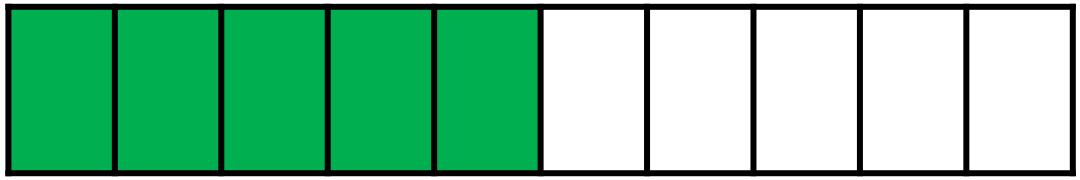
Year 3 - Summer - Block 1

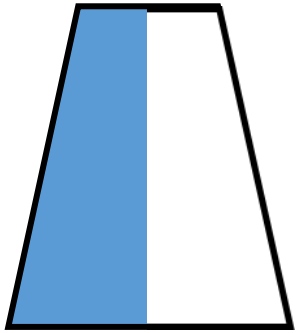
Fractions

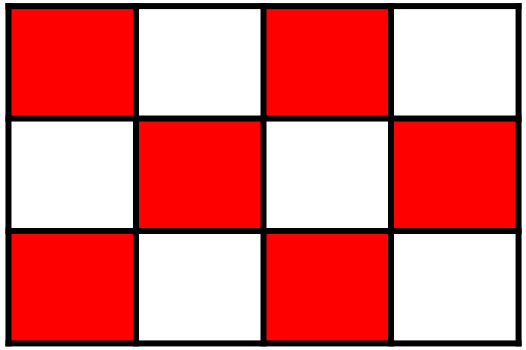
Explain how the diagram shows both $\frac{2}{3}$ and $\frac{4}{6}$

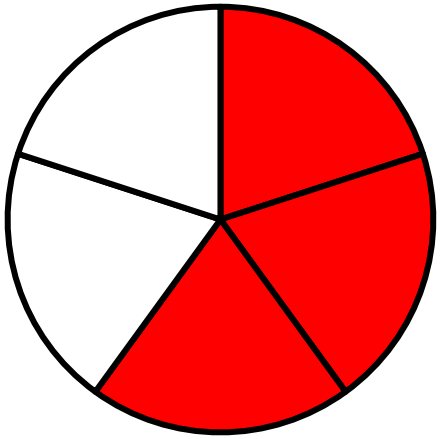


Which is the odd one out? Explain why.









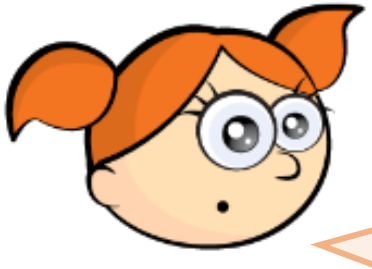
Teddy makes this fraction:

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

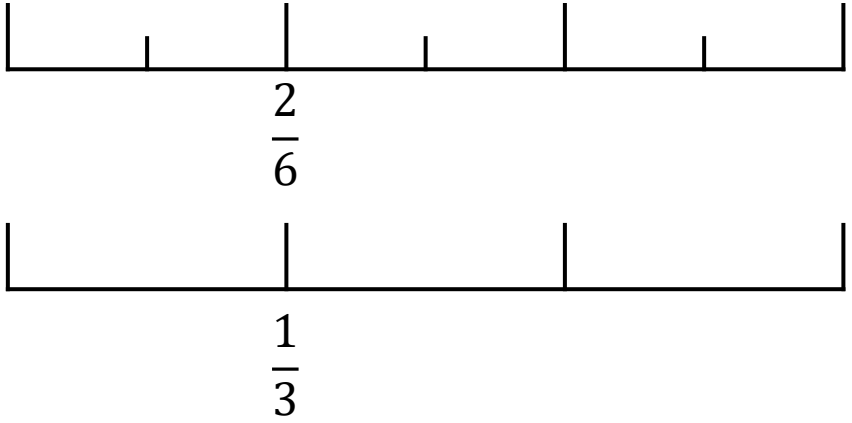
Who is correct? Who is incorrect? Explain why.

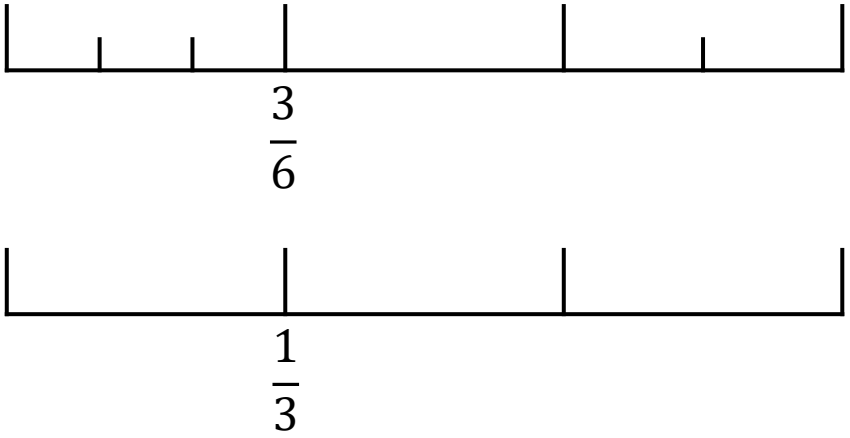
Alex and Tommy are using number lines to explore equivalent fractions.



Alex

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

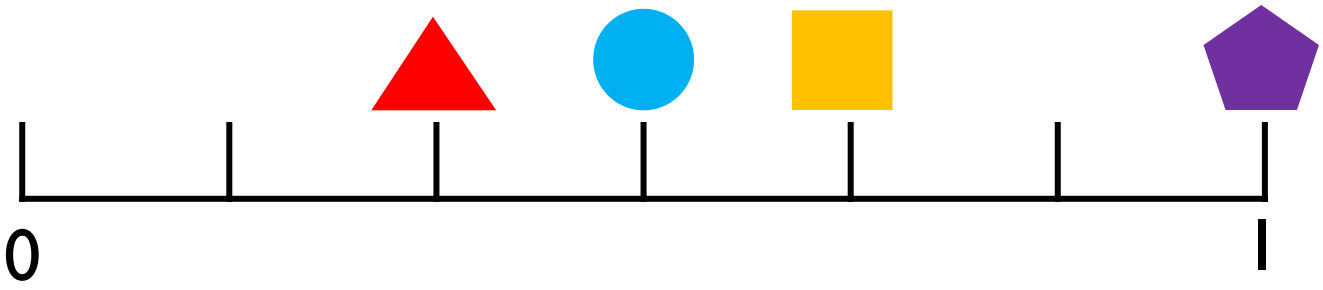




$\frac{3}{6} = \frac{1}{3}$

Tommy

Who do you agree with? Explain why.



Use the clues to work out which fraction is being described for each shape.

- My denominator is 6 and my numerator is half of my denominator.
- I am equivalent to $\frac{4}{12}$
- I am equivalent to one whole
- I am equivalent to $\frac{2}{3}$

Can you write what fraction each shape is worth?

Can you record an equivalent fraction for each one?

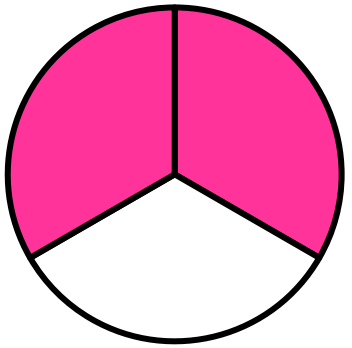
Always, Sometimes, Never.

If a fraction is equivalent to one half, the denominator is double the numerator.

Prove it.

Can you find any relationships between the numerator and denominator for other equivalent fractions?

Dora has shaded a fraction.



She says,

I am thinking of an equivalent fraction to the shaded fraction where the numerator is 9

Is this possible?
Explain why.

I know that $\frac{1}{3}$ is larger than $\frac{1}{2}$ because 3 is larger than 2

Do you agree with Dora?
Explain how you know.

Complete the missing denominator.

How many different options can you find?

$$\frac{1}{2} > \frac{1}{\square} > \frac{1}{10}$$

Here are three fractions.

$$\frac{3}{8} \quad \frac{3}{5} \quad \frac{1}{8}$$

Which fraction is the largest? How do you know?

Which fraction is the smallest? How do you know?

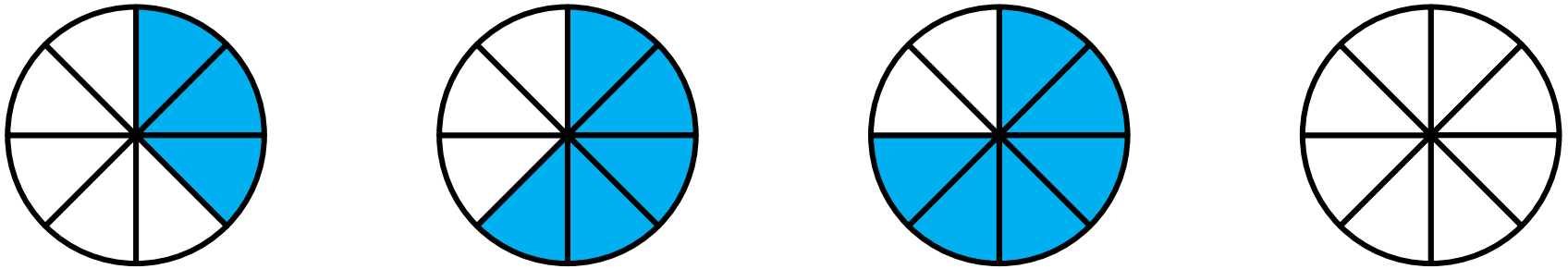
When the denominators are the same, the larger the numerator, the smaller the fraction.

Is Jack correct?

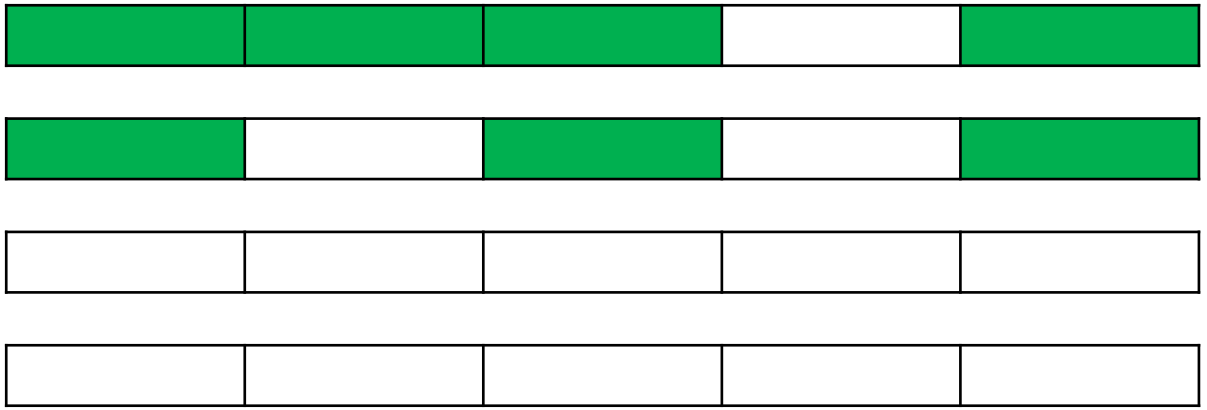
Prove it.

Shade the blank diagrams so the fractions are ordered correctly.

Fractions in ascending order



Fractions in descending order



Rosie and Whitney are solving:

$$\frac{4}{7} + \frac{2}{7}$$

Rosie says,

The answer is $\frac{6}{7}$

Whitney says,

The answer is $\frac{6}{14}$

Who do you agree with?
Explain why.

Mo and Teddy share these chocolates.

They both eat an odd number of chocolates.
Complete this number sentence to show what fraction of the chocolates they each could have eaten.

$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{12}{12}$$

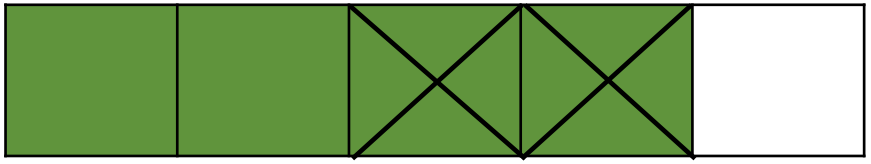
Find the missing fractions:

$$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \frac{\square}{7}$$

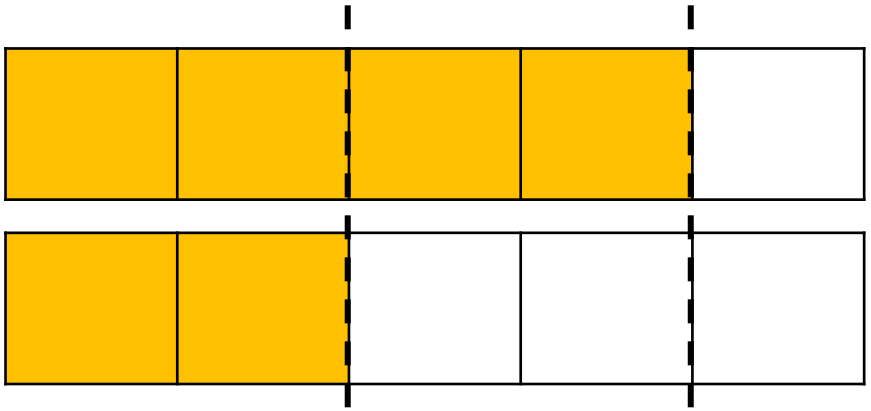
$$\frac{\square}{9} - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$$

Jack and Annie are solving $\frac{4}{5} - \frac{2}{5}$

Jack's method:



Annie's method:



They both say the answer is two fifths.
Can you explain how they have found their answers?

How many fraction addition and subtractions can you make from this model?