

Concept: Fractions
Small Step: Making a
Whole

Daniel got 24 presents from friends at his birthday party. Mum and Dad gave him 6 more. How many presents did he get altogether?

He only opened half of them at the party. How many were still wrapped up?



He opened a further ten before he went to bed. How many were left until the next day?

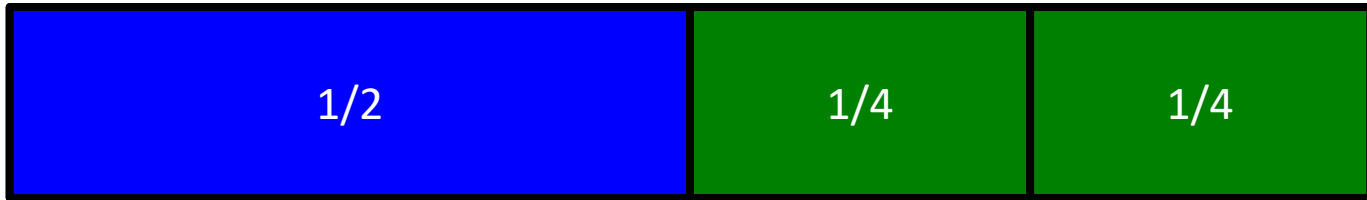
Lets make a whole



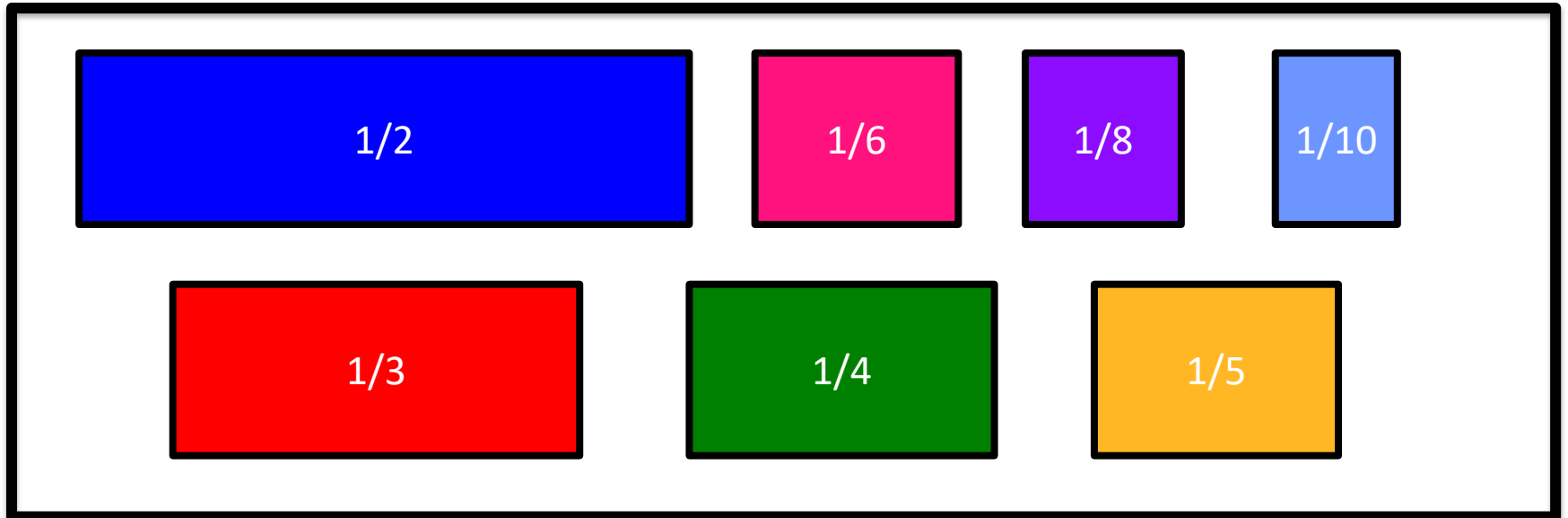
Using the following fractions make a whole

A collection of seven colored rectangles, each representing a fraction. The rectangles are arranged in two rows. The top row contains four rectangles: a large blue rectangle labeled $1/2$, a pink square labeled $1/6$, a purple square labeled $1/8$, and a light blue square labeled $1/10$. The bottom row contains three rectangles: a red rectangle labeled $1/3$, a green square labeled $1/4$, and an orange square labeled $1/5$. All rectangles have black outlines.

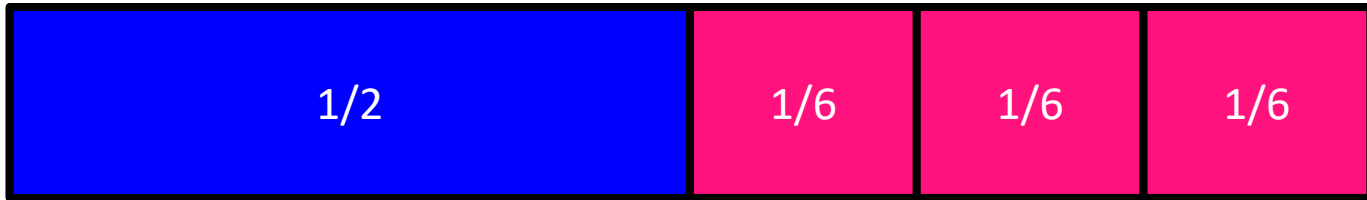
Lets make a whole



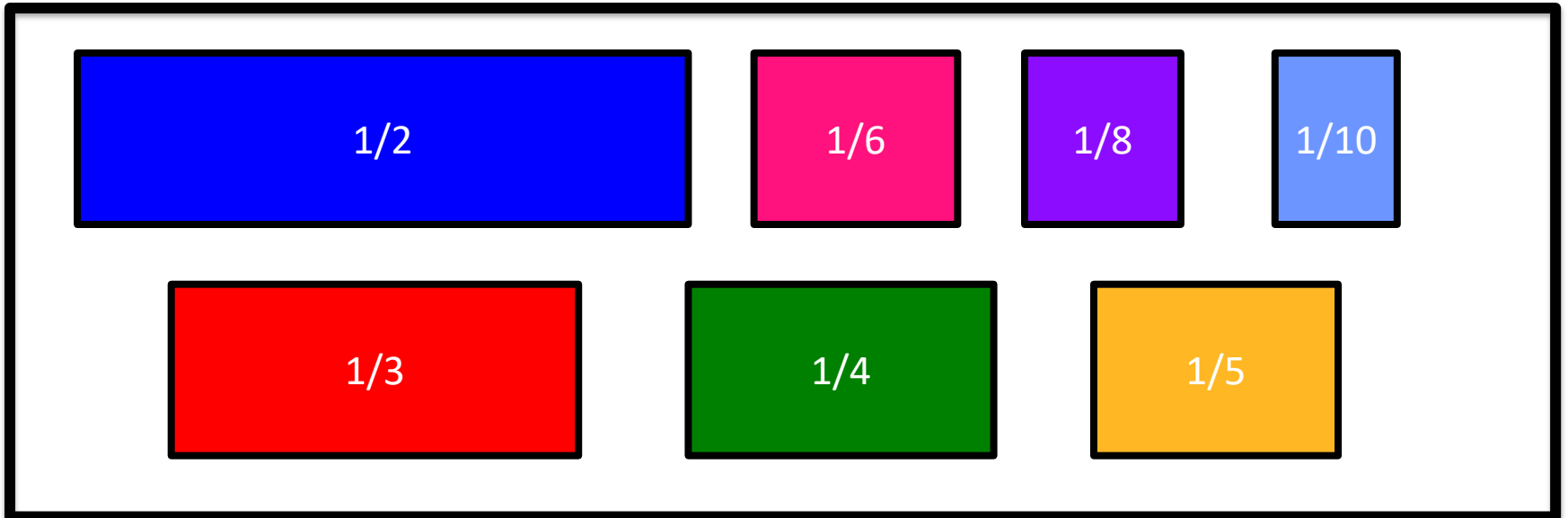
$$1 = 1/2 + 2/4$$



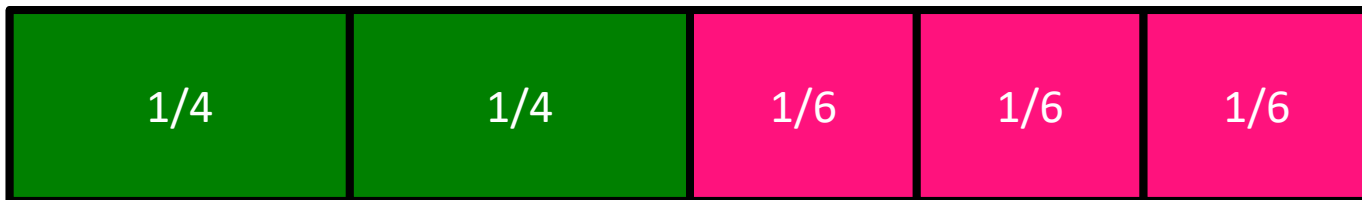
Lets make a whole



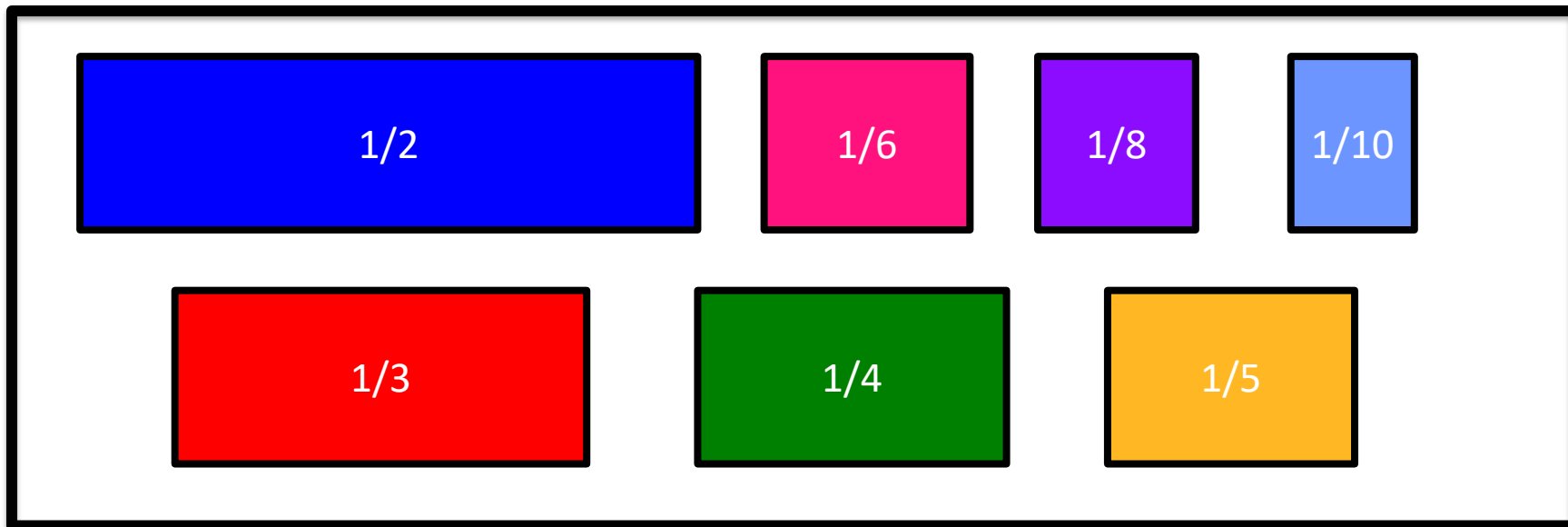
$$1 = 1/2 + 3/6$$



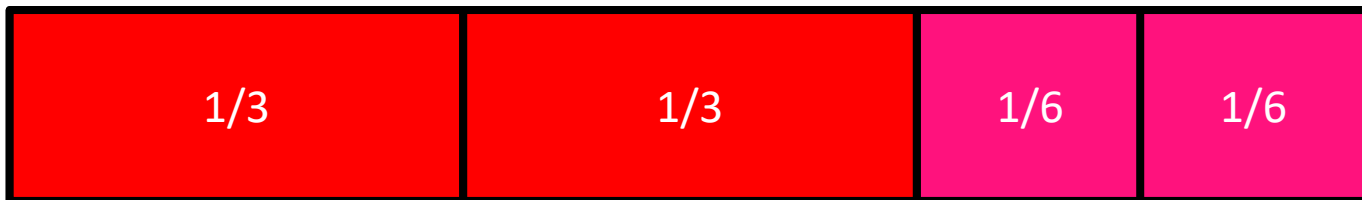
Lets make a whole



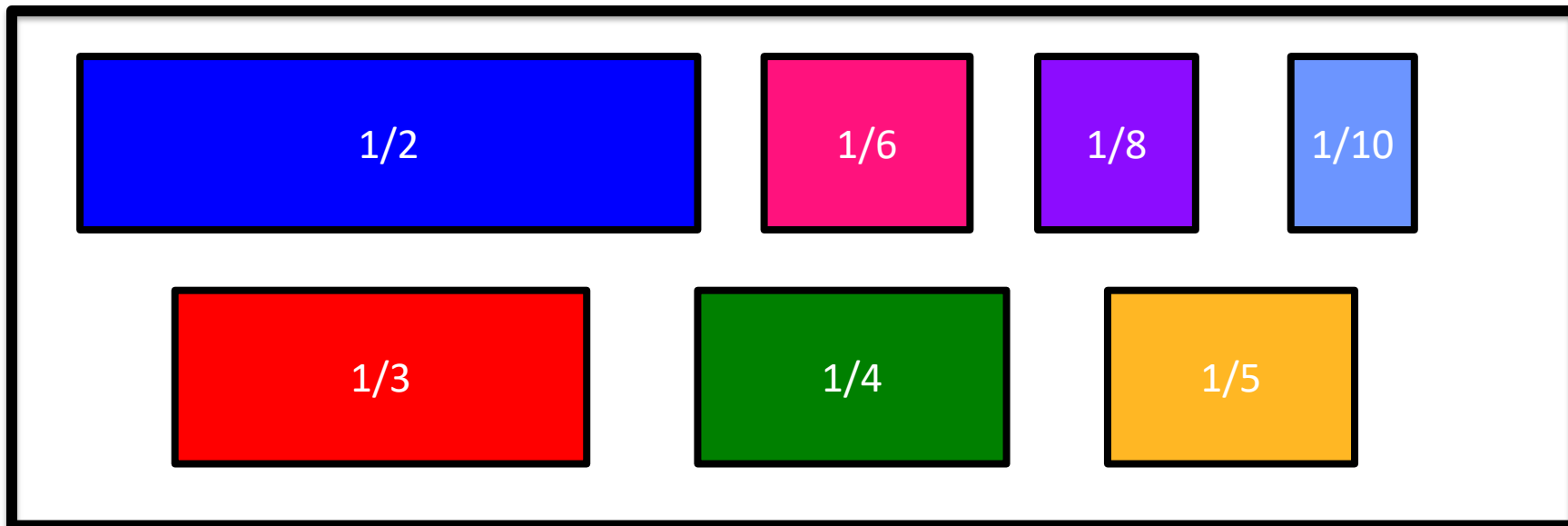
$$1 = 2/4 + 3/6$$

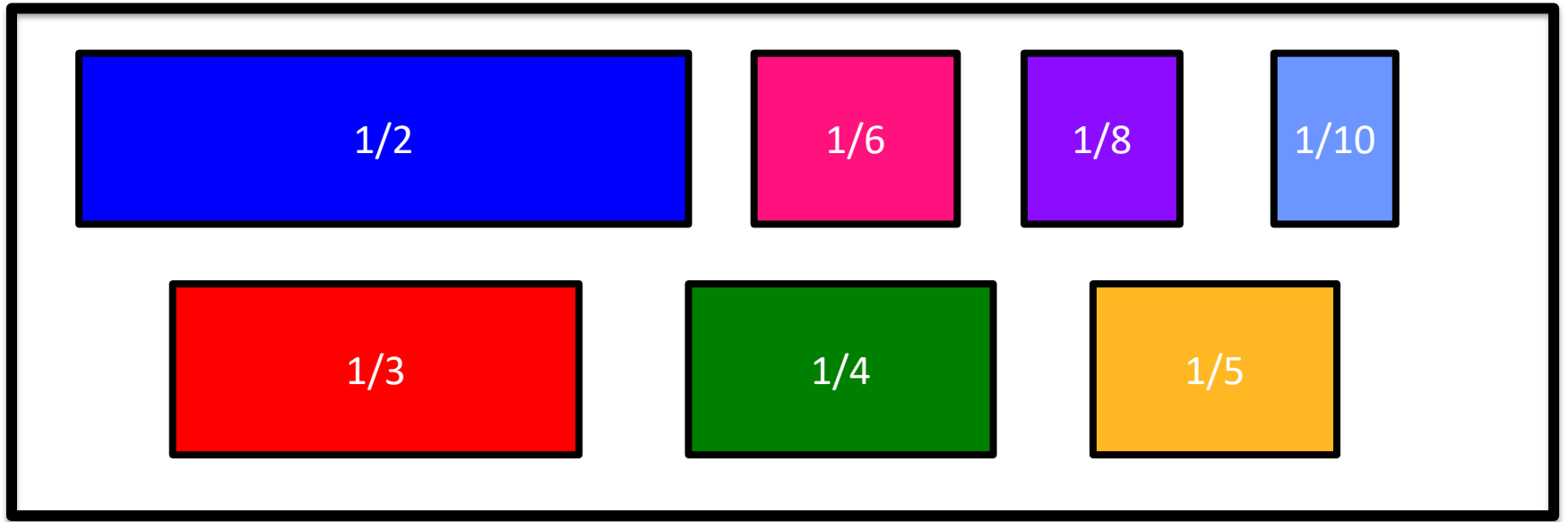


Lets make a whole

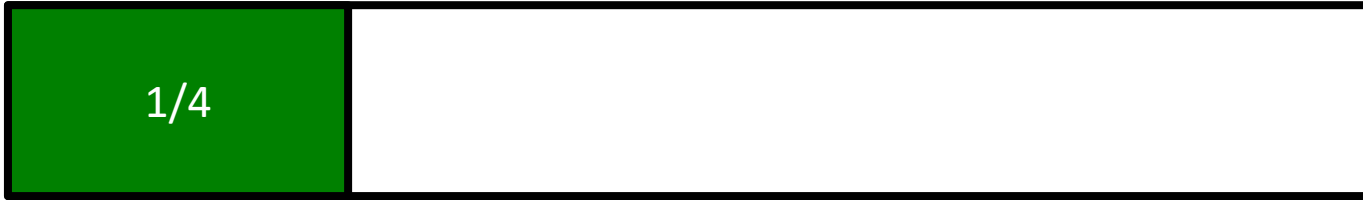


$$1 = 2/3 + 2/6$$





Complete the table by adding fractions to make a whole



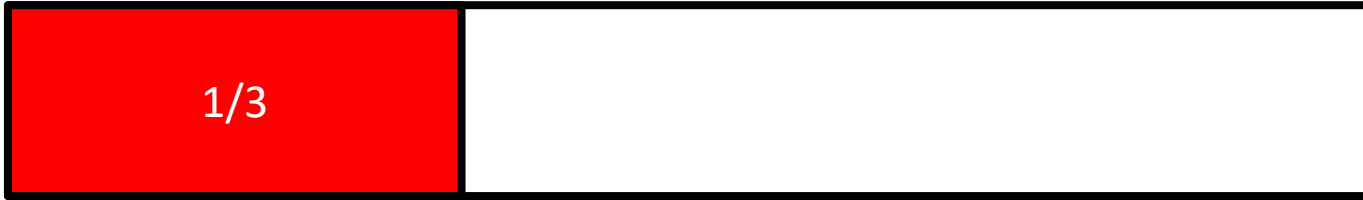
$$1 = 1/4 + \dots\dots\dots$$



$$1 = 2/5 + \dots\dots\dots$$



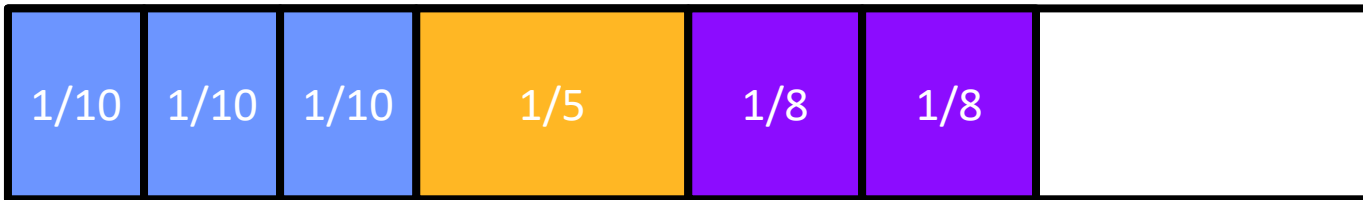
$$1 = 5/10 + \dots\dots\dots$$



$1 = 1/3 + \dots\dots\dots$



$1 = 1/4 + 1/2 \dots\dots\dots$



$1 = 3/10 + 1/5 + 2/8 \dots\dots\dots$

Pizza Challenge

How many different ways can you make a quarter of a pizza?

Pizza Challenge

How many different
ways can you make half a
pizza?

Pizza Challenge

How many different ways can you make a whole pizza?

True or False?

Two thirds and one quarter
makes a whole pizza?

Why?

Concept: Fractions
Small Step: Making a
Whole

Georgia cuts 12cm off a piece of ribbon. It is now 88cm long. What did it measure at the start?

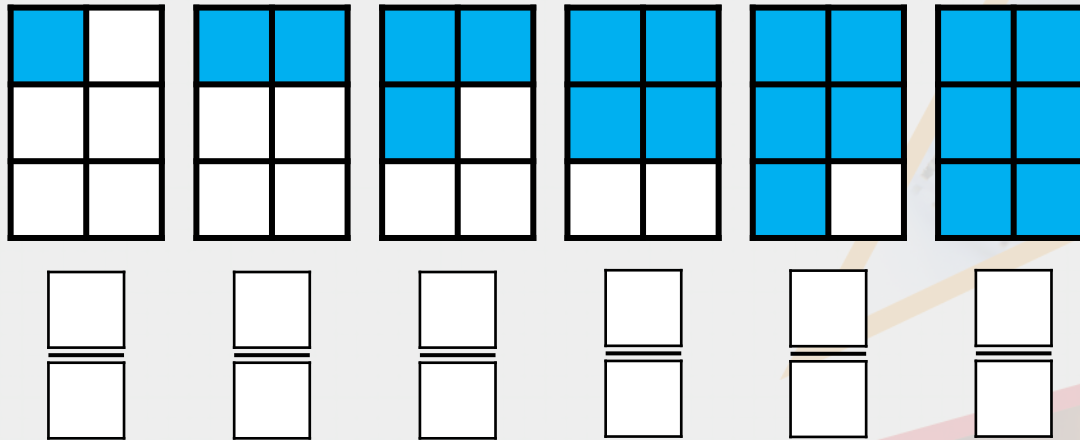
She then cuts it in half.
What does each half measure?...



She wants a piece that is 35cm long.
What must she trim off to get this?

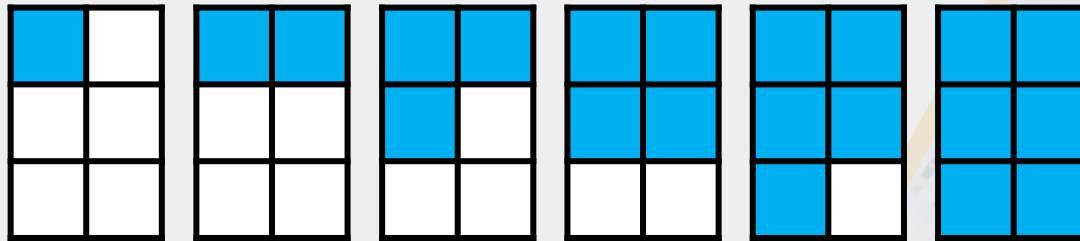
Introduction

Write the fraction for each image.



Introduction

Write the fraction for each image.



$$\frac{1}{6}$$

$$\frac{2}{6}$$

$$\frac{3}{6}$$

$$\frac{4}{6}$$

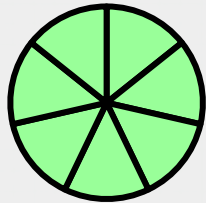
$$\frac{5}{6}$$

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

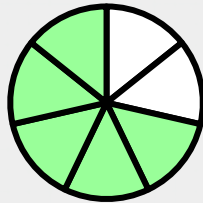
Varied Fluency 1

Complete the fractions and join them to the correct representation.

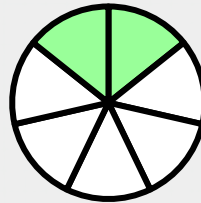
A.



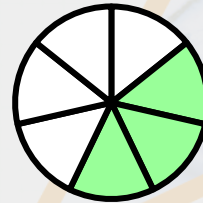
B.



C.



D.



5

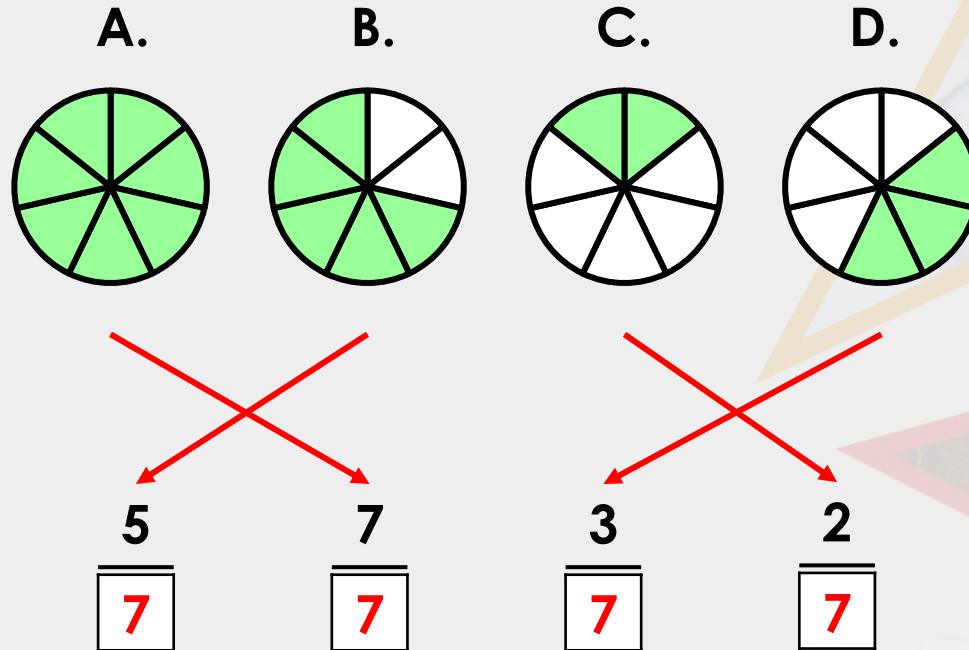
7

3

2

Varied Fluency 1

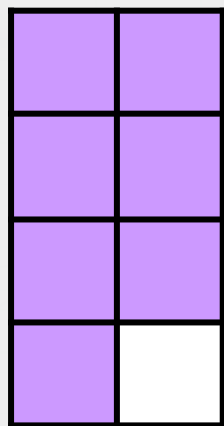
Complete the fractions and join them to the correct representation.



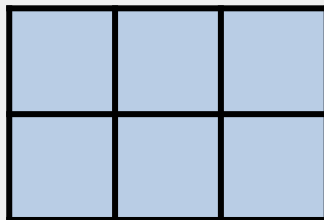
Varied Fluency 2

Tick the image which is equivalent to a whole. Write the fraction for each representation.

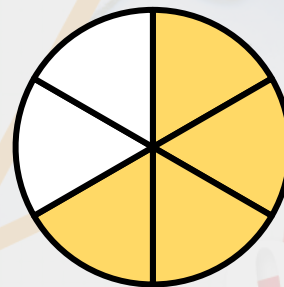
A.



B.



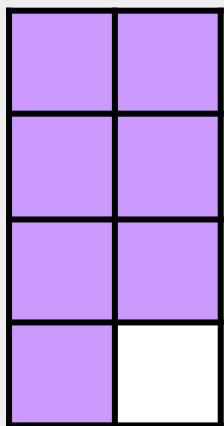
C.



Varied Fluency 2

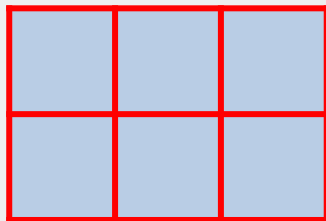
Tick the image which is equivalent to a whole. Write the fraction for each representation.

A.



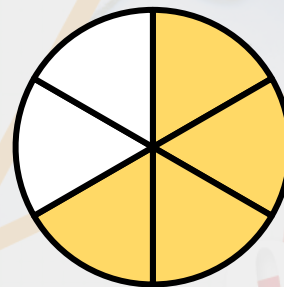
$\frac{7}{8}$

B.



$\frac{6}{6}$

C.



$\frac{4}{6}$

Varied Fluency 3

Use the image to complete the sentence



$$\begin{array}{|c|} \hline 4 \\ \hline \square \\ \hline \end{array} \text{ and } \begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array} \text{ make } \begin{array}{|c|} \hline 7 \\ \hline \square \\ \hline \end{array}$$

Varied Fluency 3

Use the image to complete the sentence



$$\frac{4}{7} \text{ and } \frac{3}{7} \text{ make } \frac{7}{7}$$

Varied Fluency 4

Circle two fractions which make a whole.

$$\frac{2}{7}$$

$$\frac{3}{6}$$

$$\frac{2}{6}$$

$$\frac{4}{6}$$

Varied Fluency 4

Circle two fractions which make a whole.

$$\frac{2}{7}$$

$$\frac{3}{6}$$

$$\frac{2}{6}$$

$$\frac{4}{6}$$

Independent Task

Fluency Task

Plenary

Problem Solving 1

Jacob and Izzy are sharing $\frac{4}{6}$ marbles.

Together they have shared $\frac{4}{6}$ of the marbles.



How many marbles could Jacob and Izzy each have?
Show all the combinations.

Problem Solving 1

Jacob and Izzy are sharing marbles.

Together they have shared $\frac{6}{6}$ of the marbles.



How many marbles could Jacob and Izzy each have?
Show all the combinations.

<u>Jacob</u>	<u>Izzy</u>
6	0
5	1
4	2
3	3
2	4
1	5
0	6

Concept: Fractions
Small Step: Making a
Whole

I have 15p in 5p coins. How many coins do I have?

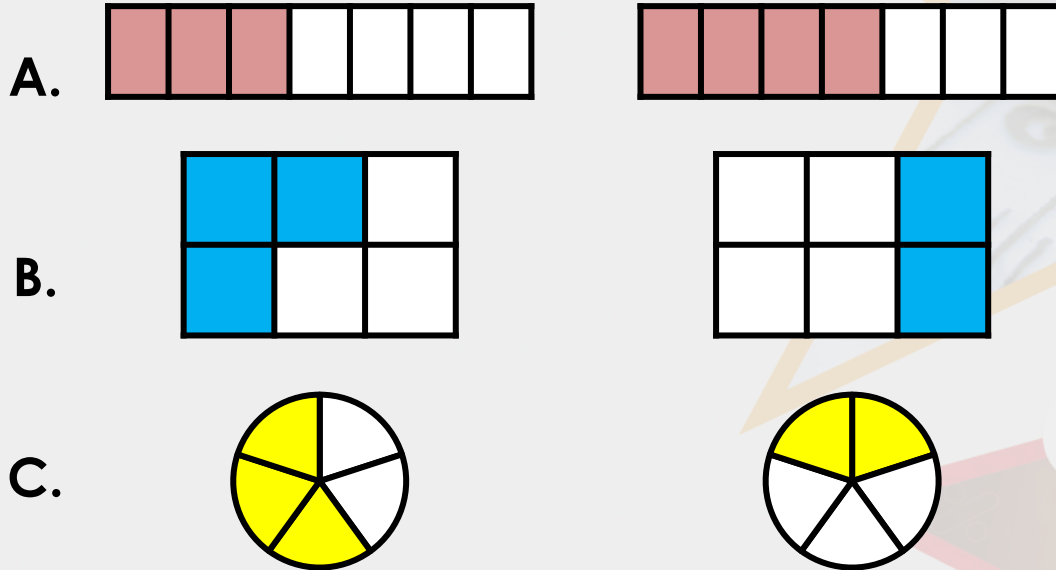
I save up and have seven 5p coins. How much money do I have?...



How much money will I have if I can save up nine 5p coins?

Reasoning 1

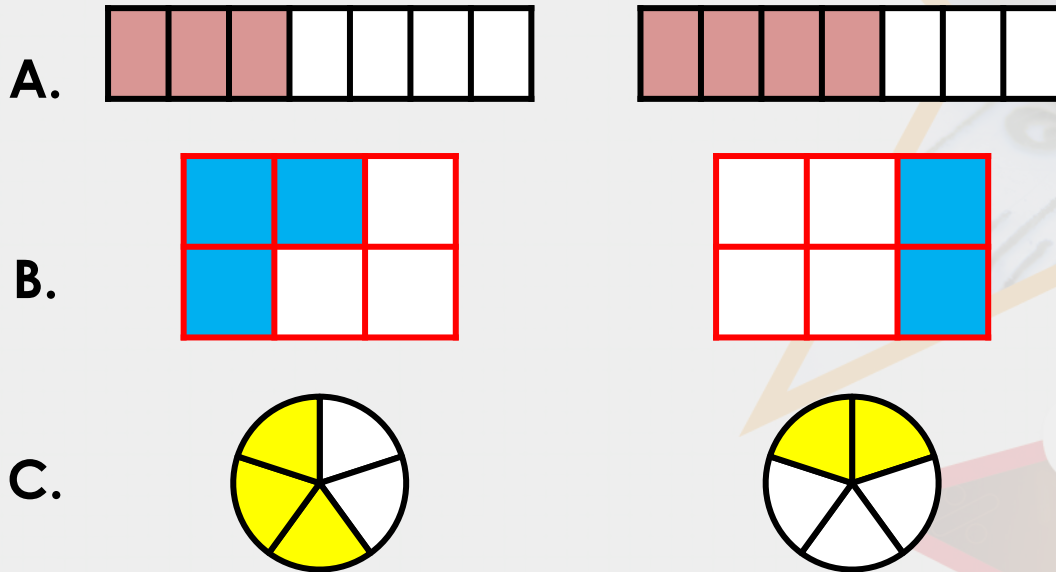
Which pair of shapes is the odd one out?



Explain your answer.

Reasoning 1

Which pair of shapes is the odd one out?

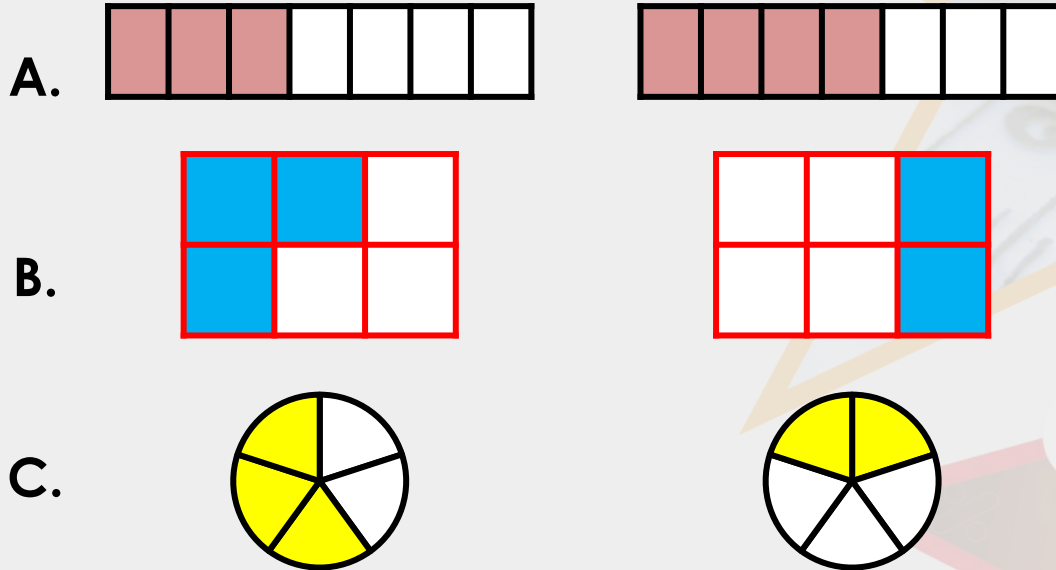


Explain your answer.

B is the odd one out because...

Reasoning 1

Which pair of shapes is the odd one out?



Explain your answer.

B is the odd one out because the shaded part of the shapes do not make a whole.

Reasoning 2

Romeo and Lizzie are discussing the statement below.

$$\frac{?}{5} + \frac{?}{5} = \frac{5}{5}$$



Romeo

I think the missing numerators are only odd numbers.

I think the numerators are no greater than 5 and no less than 1.



Lizzie

Who is correct? Convince me.

Reasoning 2

Romeo and Lizzie are discussing the statement below.

$$\frac{?}{5} + \frac{?}{5} = \frac{5}{5}$$



Romeo

I think the missing numerators are only odd numbers.

I think the numerators are no greater than 5 and no less than 1.



Lizzie

Who is correct? Convince me.
Lizzie is correct because...

Reasoning 2

Romeo and Lizzie are discussing the statement below.

$$\frac{?}{5} + \frac{?}{5} = \frac{5}{5}$$



Romeo

I think the missing numerators are only odd numbers.

I think the numerators are no greater than 5 and no less than 1.



Lizzie

Who is correct? Convince me.

Lizzie is correct because she has identified that fractions can be no greater than $\frac{5}{5}$.

Independent Task

Problem Solving and Reasoning Task

Plenary

Simon eats 2 quarters of a pizza. Jan eats one half of a pizza? Jan says she has eaten more pizza than Simon. Is she correct?

Concept: Fractions
Small Step: Tenths

A rabbit ate 4 carrots on Monday, 7 carrots on Tuesday and 6 carrots on Wednesday. How many carrots was that?

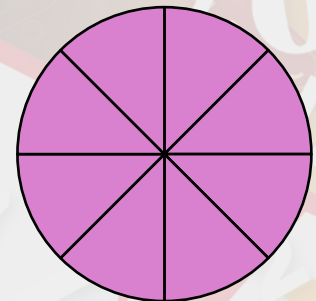
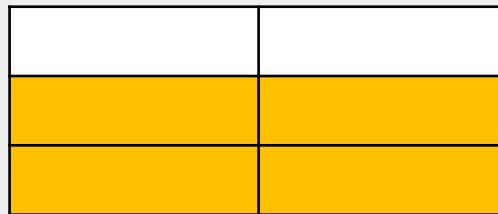
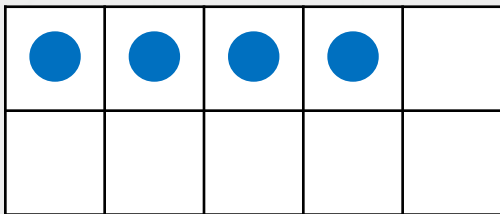
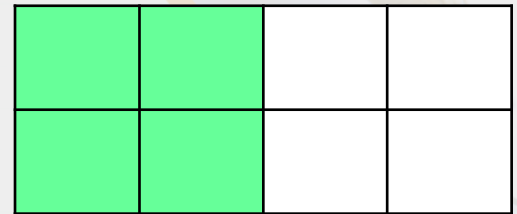
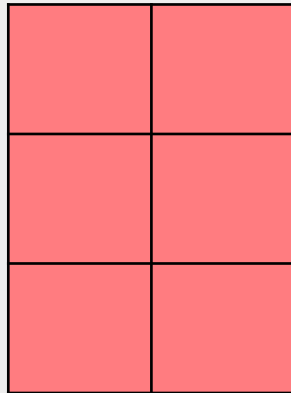
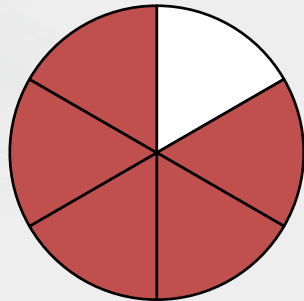
He ate 5 carrots on Thursday and 4 more on Friday. How many has he eaten in total so far?...



He eats 3 on Saturday and 8 on Sunday. How many carrots did the rabbit eat that week?

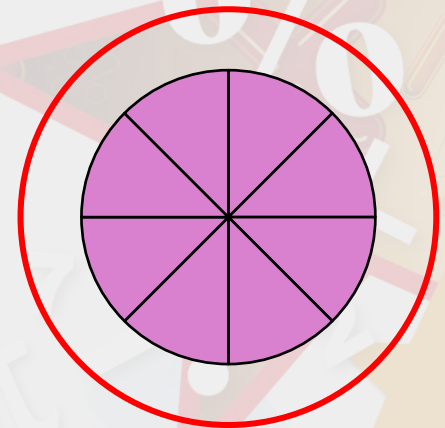
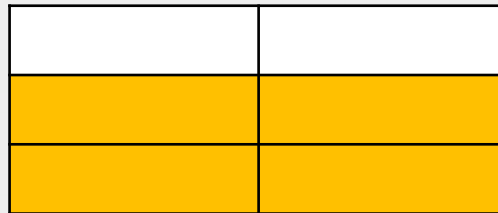
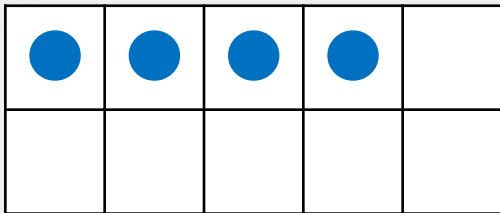
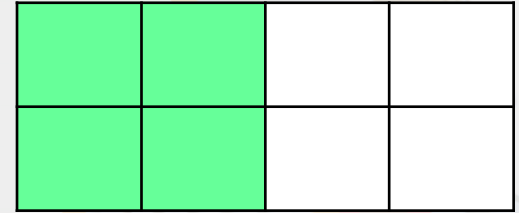
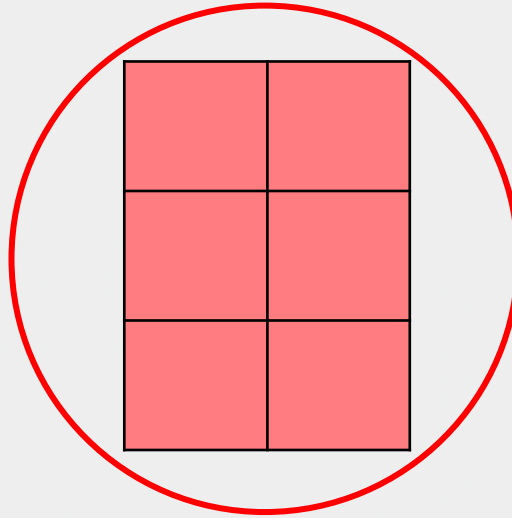
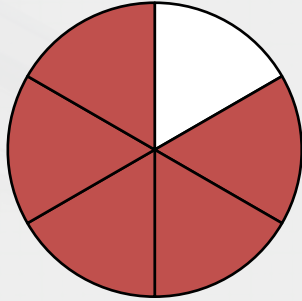
Introduction

Circle the images that are equivalent to a whole.



Introduction

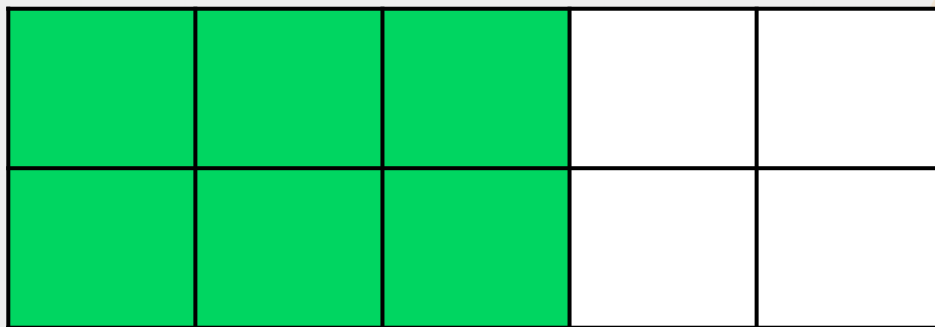
Circle the images that are equivalent to a whole.



Varied Fluency 1

How many tenths are shaded?

Write the answer as a fraction and in words.

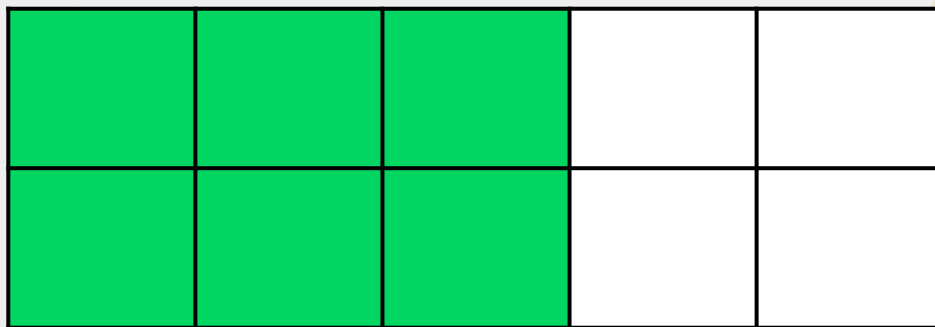


$$\frac{\boxed{}}{\boxed{10}} = \underline{\quad} \text{ tenths}$$

Varied Fluency 1

How many tenths are shaded?

Write the answer as a fraction and in words.



$$\frac{6}{10} = \text{six tenths}$$

Varied Fluency 2

There are ten books on a shelf.



Eight of them are non-fiction.

Write this number as a fraction.

$$\frac{\square}{10}$$

Varied Fluency 2

There are ten books on a shelf.



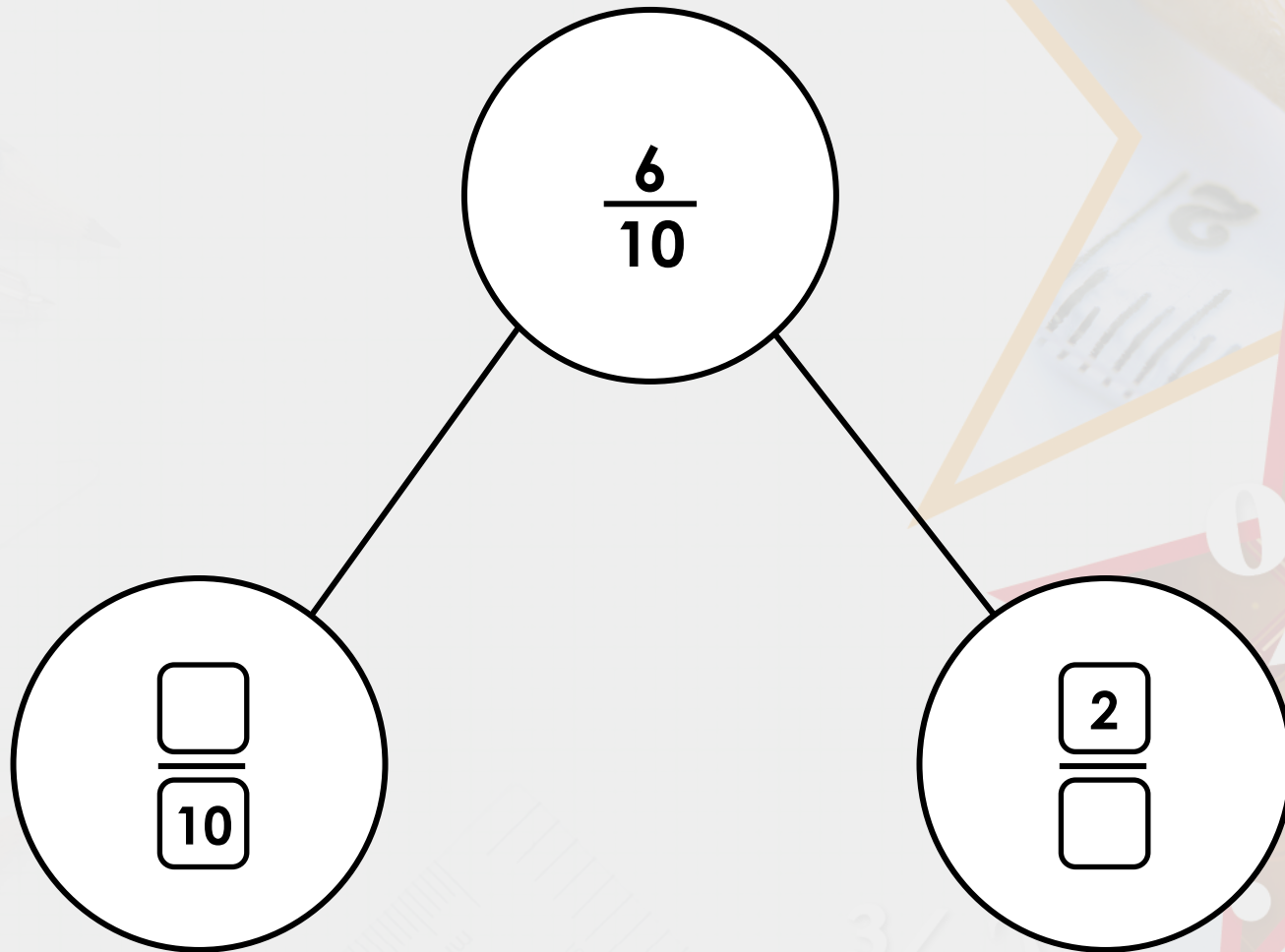
Eight of them are non-fiction.

Write this number as a fraction.

$$\frac{8}{10}$$

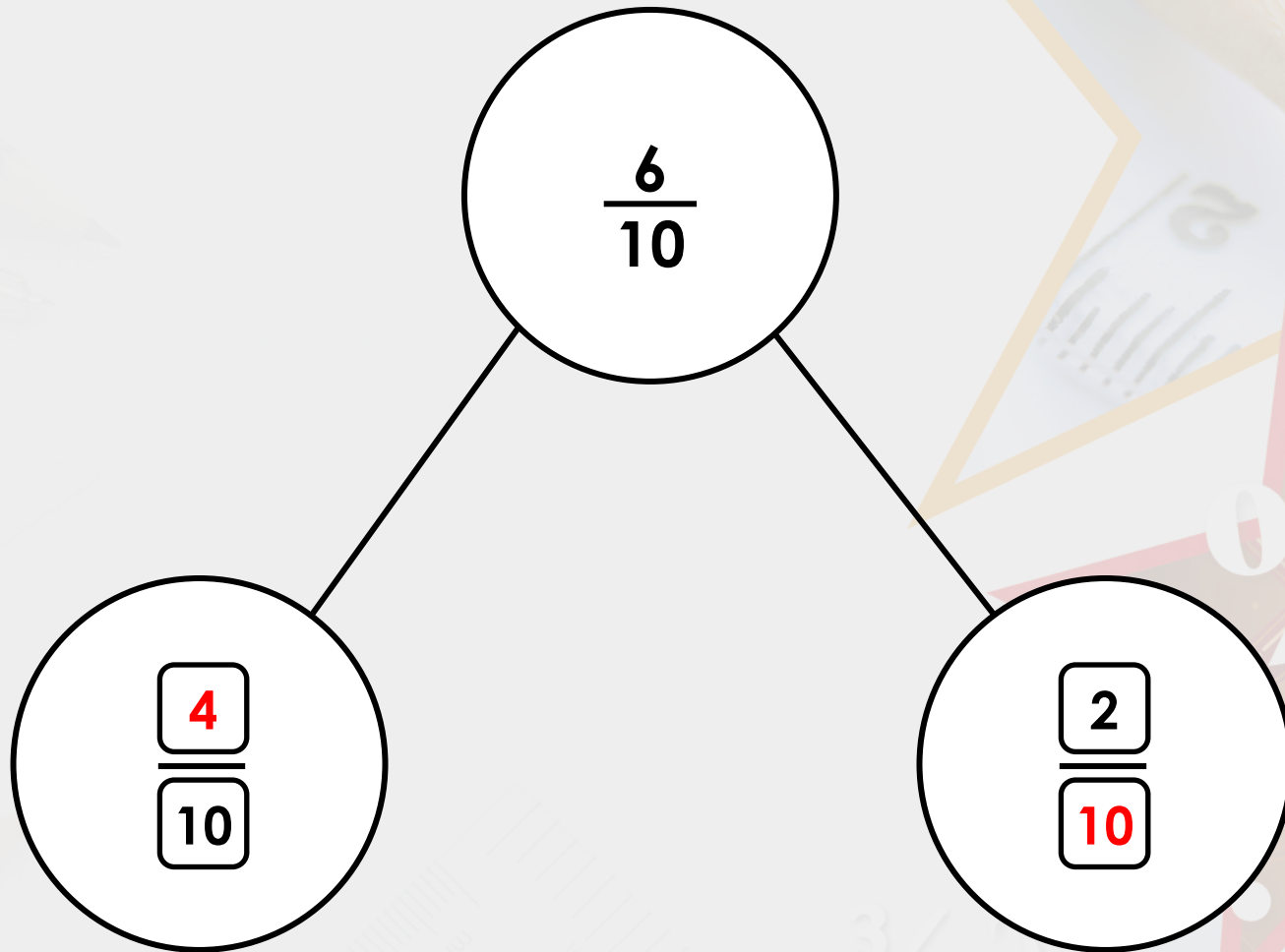
Varied Fluency 3

Complete the part-whole model.



Varied Fluency 3

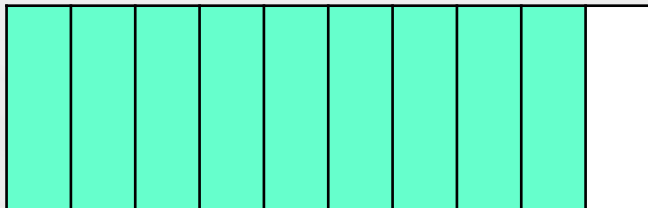
Complete the part-whole model.



Varied Fluency 4

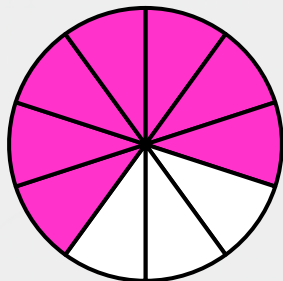
Match the images to the fractions.

A.



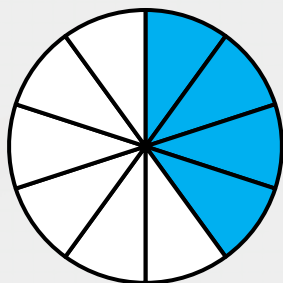
$$\frac{7}{10}$$

B.



$$\frac{4}{10}$$

C.

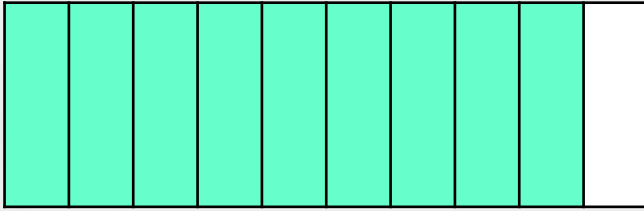


$$\frac{9}{10}$$

Varied Fluency 4

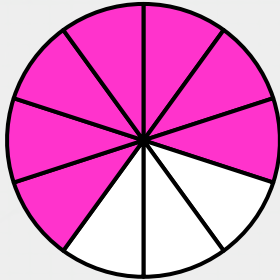
Match the images to the fractions.

A.



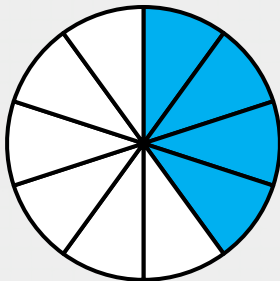
$$\frac{7}{10}$$

B.



$$\frac{4}{10}$$

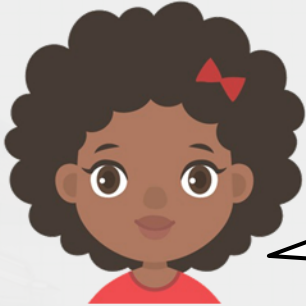
C.



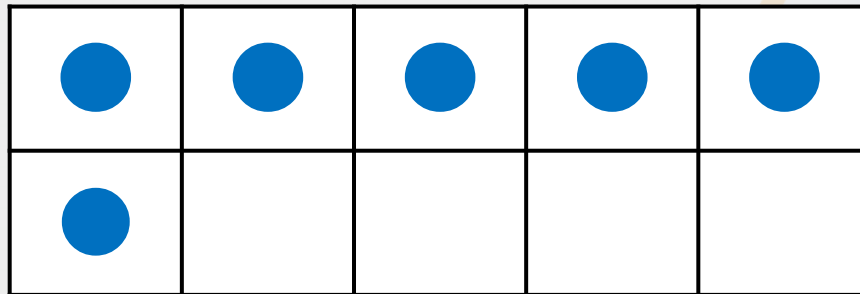
$$\frac{9}{10}$$

Reasoning 1

Daisy is using a ten frame and counters to represent tenths.



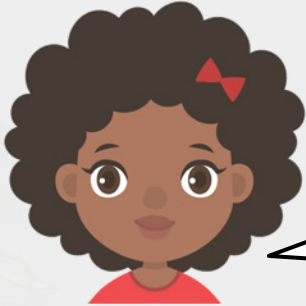
I would need four more
counters to show $\frac{9}{10}$.



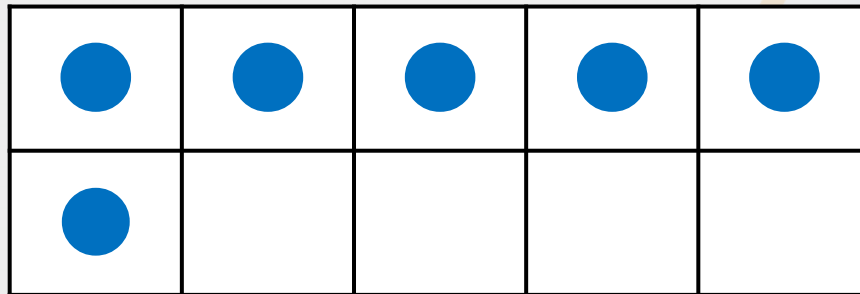
Is she correct? Explain your answer.

Reasoning 1

Daisy is using a ten frame and counters to represent tenths.



I would need four more
counters to show $\frac{9}{10}$.



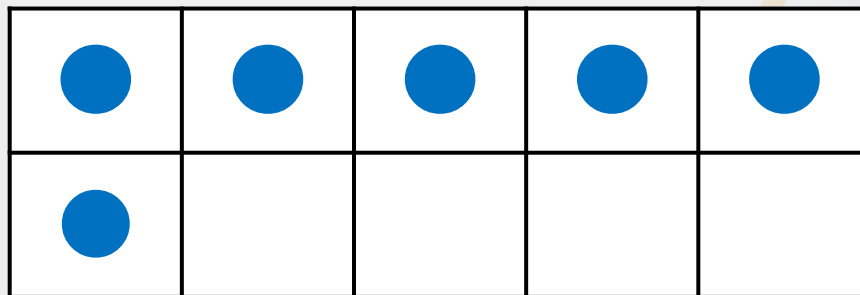
Is she correct? Explain your answer.
No, she is incorrect because...

Reasoning 1

Daisy is using a ten frame and counters to represent tenths.



I would need four more
counters to show $\frac{9}{10}$.



Is she correct? Explain your answer.

No, she is incorrect because there would be 10 counters altogether and the tens frame would be full. Therefore, it would show $\frac{10}{10}$.

Problem Solving 1

Ruth is thinking of a tenth.

The numerator is smaller than 9 but larger than 1.

The numerator is an even number.

What could Ruth's fraction be?

Write three possibilities.

Problem Solving 1

Ruth is thinking of a tenth.

The numerator is smaller than 9 but larger than 1.

The numerator is an even number.

What could Ruth's fraction be?

Write three possibilities.

Various answers, for example: $\frac{2}{10}$, $\frac{6}{10}$, $\frac{8}{10}$.

Problem Solving 2

Match each description to the correct fraction.

A.



My fraction is two tenths.

B.



My numerator is one less than ten.

C.



My numerator is the sum of three and two.




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

$$\frac{5}{10}$$

$$\frac{9}{10}$$

Problem Solving 2

Match each description to the correct fraction.

- A.  My fraction is two tenths. = $\frac{2}{10}$
- B.  My numerator is one less than ten. = $\frac{9}{10}$
- C.  My numerator is the sum of three and two. = $\frac{5}{10}$

Answers are shown above.

Activity 3

Tenths

Tia has one cookie.
She wants to share it equally between 10 people.

What fraction of the cookie will each person get?

There is _____ cookie.

It is shared equally between _____ people.

Each person has $\frac{\square}{\square}$ of the cookie.

_____ \div _____ = _____

What fraction would they get if Tia had two cookies? four cookies? eight cookies?

