

# Concept: Fractions

## Small Step: Count in Tenths

Lesson 1

A toy box had 12 dinosaurs in it.  
Half the dinosaurs were green.  
How many were not green?

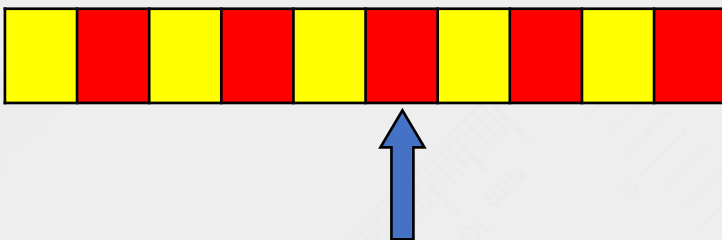
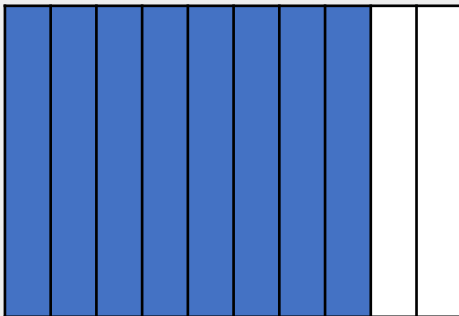
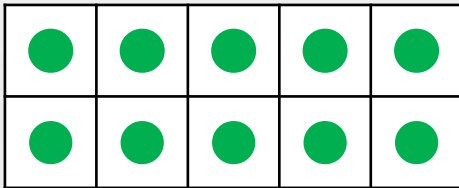
Half of the green ones  
had horns. How many  
green ones had horns?...



Half of the non green ones had horns.  
How many dinosaurs had horns in total?

## Introduction

Match the image or words to the fraction.  
Which is the odd one out?



$$\frac{6}{10}$$

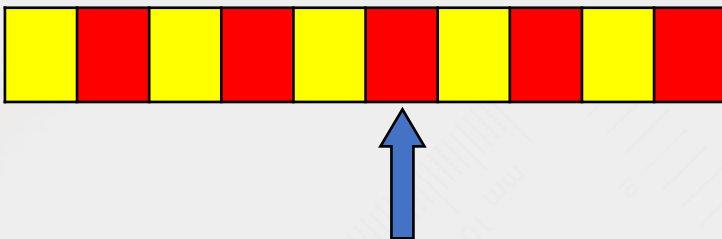
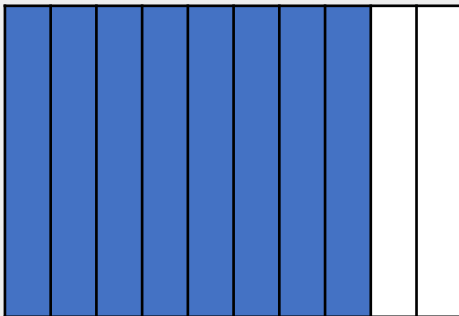
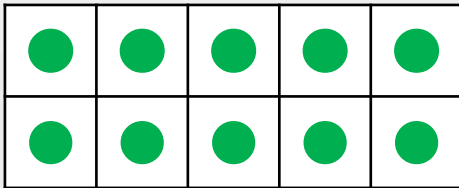
10  
tenths

$$\frac{3}{10}$$

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

## Introduction

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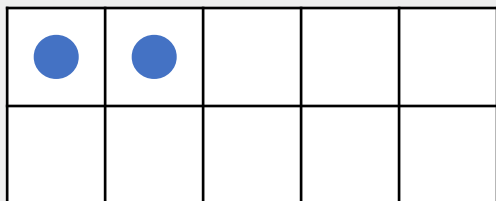
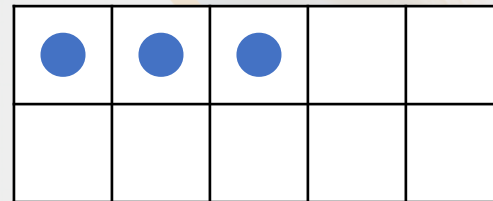
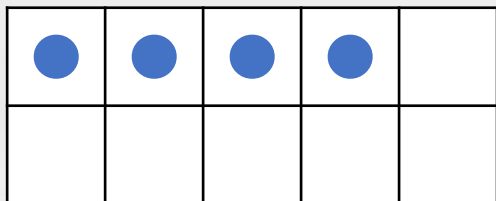
10  
tenths

$$\frac{3}{10}$$

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

## Varied Fluency 1

Sanjay is using counters to show tenths.



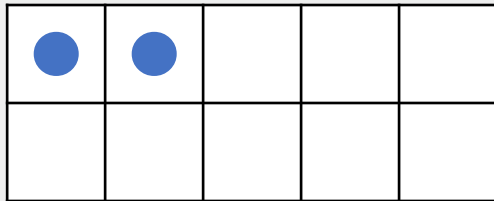
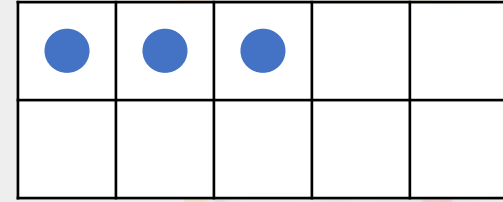
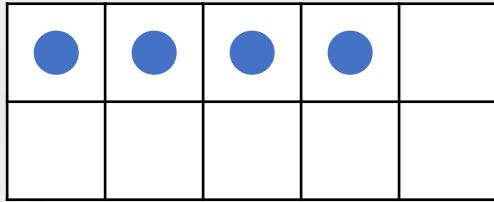
Write the next tenth in the sequence.

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## Varied Fluency 1

Sanjay is using counters to show tenths.



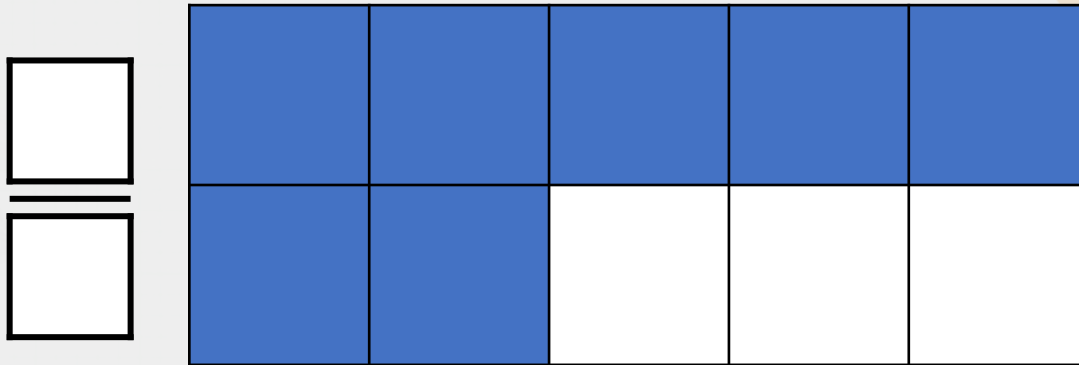
Write the next tenth in the sequence.

1

10

## Varied Fluency 2

Write the fraction shown below.


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

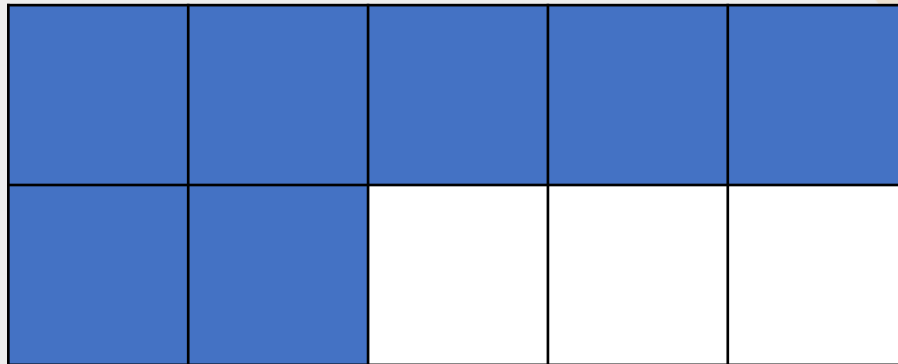
What will the next tenth be?

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

## Varied Fluency 2

Write the fraction shown below.

$\frac{7}{10}$



What will the next tenth be?

$\frac{8}{10}$



### Varied Fluency 3

Count in tenths to complete the sequence.

Use the ten frames to help you.

$$\frac{5}{10} \quad \frac{6}{10} \quad \begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array} \quad \frac{8}{10} \quad \frac{9}{10} \quad \frac{10}{10} \quad \begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array} \quad \frac{12}{10}$$

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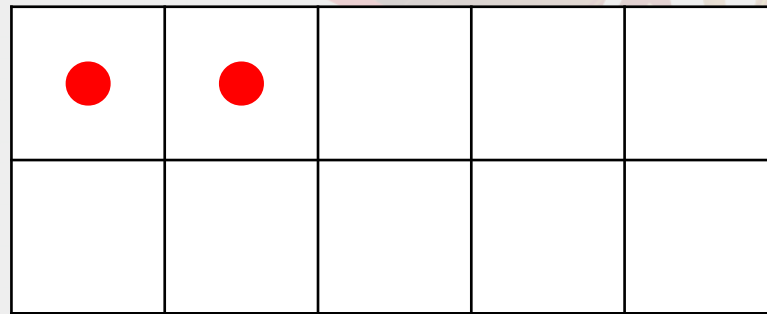
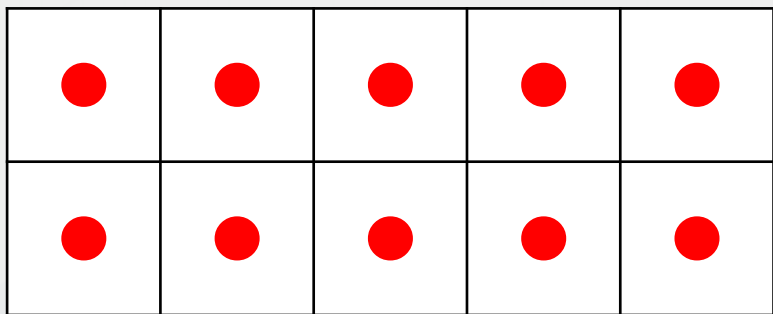
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### Varied Fluency 3

Count in tenths to complete the sequence.

Use the ten frames to help you.

$$\frac{5}{10} \quad \frac{6}{10} \quad \boxed{7} \quad \frac{8}{10} \quad \frac{9}{10} \quad \frac{10}{10} \quad \boxed{11} \quad \frac{12}{10}$$
$$\frac{\quad}{10} \quad \frac{\quad}{10} \quad \boxed{10} \quad \frac{\quad}{10} \quad \frac{\quad}{10} \quad \frac{\quad}{10} \quad \boxed{10} \quad \frac{\quad}{10}$$

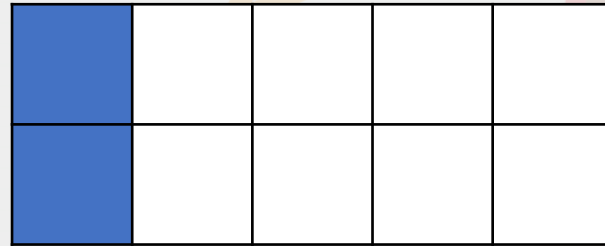
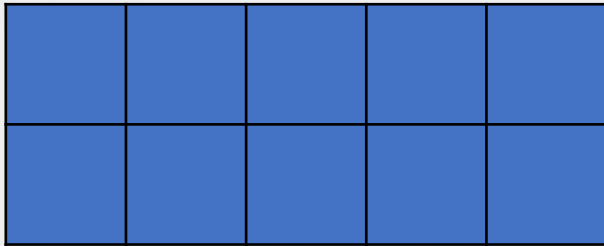


## Varied Fluency 4

Georgia says,



Two tenths more than  
ten tenths is  $\frac{12}{10}$ .



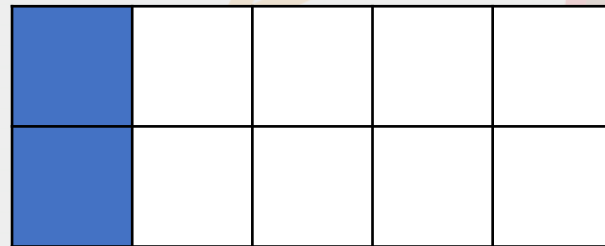
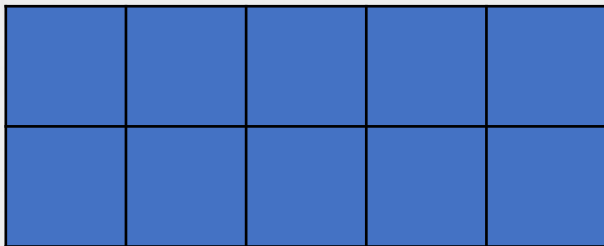
Is she correct?

## Varied Fluency 4

Georgia says,



Two tenths more than  
ten tenths is  $\frac{12}{10}$ .



Is she correct?  
**Yes, she is correct.**



## Problem Solving 1

Use the clues given to find the missing fraction.

I count backwards five tenths.

My answer is  $\frac{5}{10}$ .

What fraction did I start with?



## Problem Solving 1

Use the clues given to find the missing fraction.

I count backwards five tenths.

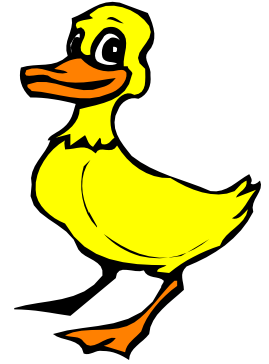
My answer is  $\frac{5}{10}$ .

What fraction did I start with?

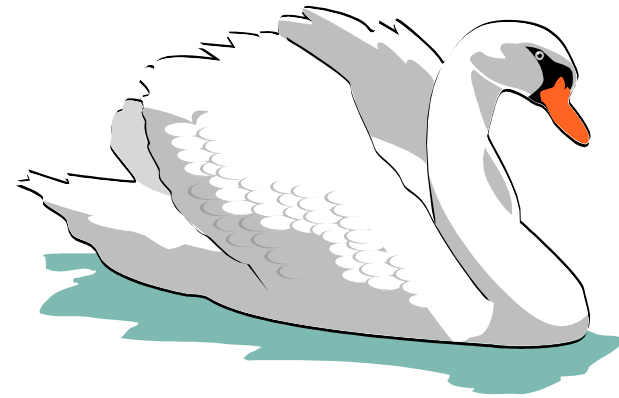
$$\frac{10}{10} \text{ or } 1$$

Lesson 2

There are 16 ducks and 5 swans on a lake. How many birds are there altogether?



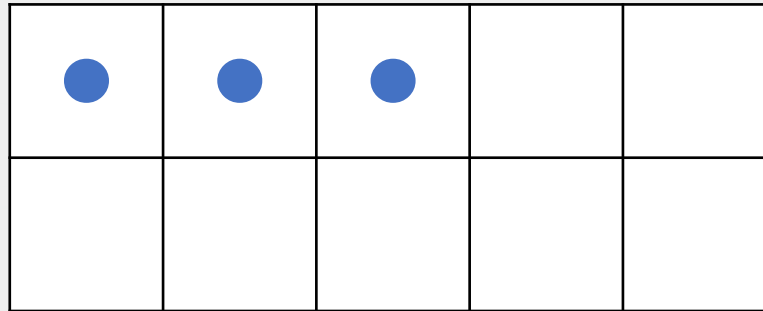
5 ducks leave.  
How many now?...



4 more ducks leave and 2 new swans arrive. How many now?

## Reasoning 1

Amir is using counters to show tenths.

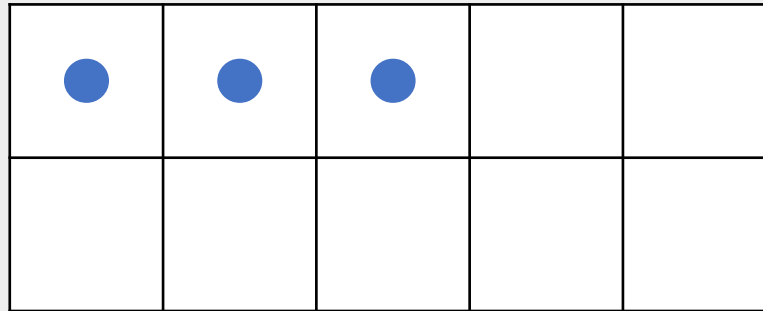


He thinks that if he takes away one counter, he will have four tenths altogether.

Is he correct? Explain how you know.

## Reasoning 1

**Amir is using counters to show tenths.**



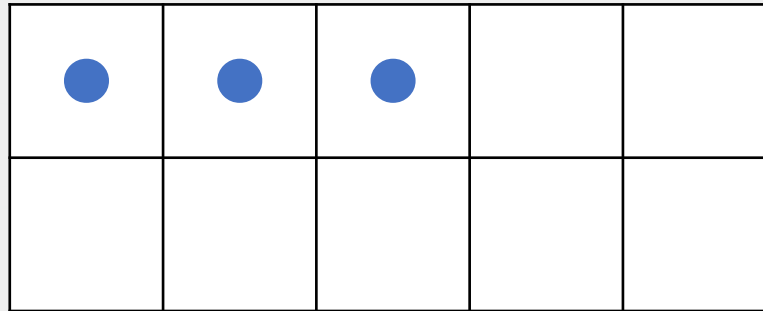
**He thinks that if he takes away one counter, he will have four tenths altogether.**

**Is he correct? Explain how you know.**

**Amir is incorrect because...**

## Reasoning 1

Amir is using counters to show tenths.



He thinks that if he takes away one counter, he will have four tenths altogether.

Is he correct? Explain how you know.

**Amir is incorrect because he would need to add one counter to have four tenths. If he takes one away, he will have two tenths.**



## Reasoning 2

Ben and Charlie are looking at two statements.

A. Four tenths less than  $\frac{12}{10}$  is  $\frac{18}{10}$ .

B.  $\frac{2}{10}$  less than  $\frac{11}{10}$  is nine tenths.

Which statement is true? Explain why.

## Reasoning 2

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Statement B is true because...

## Reasoning 2

Ben and Charlie are looking at two statements.

A. Four tenths less than  $\frac{12}{10}$  is  $\frac{18}{10}$ .

B.  $\frac{2}{10}$  less than  $\frac{11}{10}$  is nine tenths.

Which statement is true? Explain why.

Statement B is true because  $\frac{11}{10}$  is two tenths more than nine tenths.