Fractions as Tenths and Hundredths

Name: _____

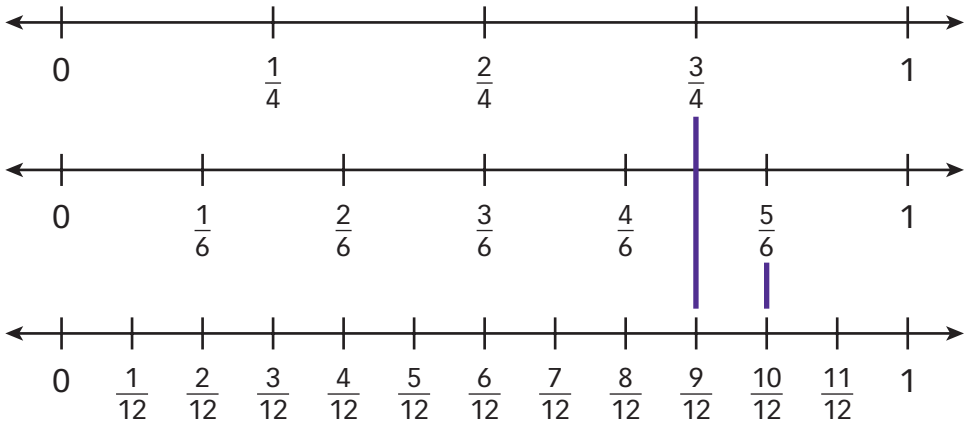
Prerequisite: Identify Equivalent Fractions

Study the example showing how to use a number line to find equivalent fractions. Then solve problems 1–8.

Example

Find a fraction equivalent to $\frac{3}{4}$ and a fraction equivalent to $\frac{5}{6}$.

The number lines show $\frac{3}{4} = \frac{9}{12}$ and $\frac{5}{6} = \frac{10}{12}$.



1 Look at the number lines in the example above. Write each equivalent fraction.

$\frac{8}{12} =$ ____ $\frac{2}{6} =$ ____ $\frac{3}{12} =$ ____ $\frac{1}{6} =$ ____

2 Write three fractions equivalent to $\frac{1}{2}$. Use the number lines above to help you.

_____

3 Fill in the missing numbers to find fractions equivalent to $\frac{5}{4}$.

$\frac{5}{4} \times \frac{\square}{2} = \frac{\square}{8}$ $\frac{5}{4} \times \frac{\square}{\square} = \frac{\square}{16}$ $\frac{5}{4} \times \frac{10}{10} = \frac{\square}{40}$

Vocabulary

equivalent fractions two or more fractions that name the same part of a whole.

Solve.

4 Shade the model below to show $\frac{2}{3}$. Then divide the model to show $\frac{2}{3} = \frac{4}{6}$.

5 Look at problem 4. Explain how dividing the model shows the equivalent fractions $\frac{2}{3} = \frac{4}{6}$.

_____

_____

_____

_____

6 Fill in the missing numbers to write equivalent fractions.

$\frac{\square}{\square} \times \frac{2}{2} = \frac{2}{4}$ $\quad \frac{\square}{3} \times \frac{\square}{\square} = \frac{8}{12}$ $\quad \frac{\square}{\square} \times \frac{\square}{2} = \frac{10}{16}$

7 Shade the model to show $\frac{1}{2}$. Then divide the model to show $\frac{1}{2} = \frac{5}{10}$.

8 Fill in the missing numbers to show that $\frac{1}{2} = \frac{5}{10}$.

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

Name: _____

Add Tenths and Hundredths Fractions

Study the example problem showing how to add tenths and hundredths fractions. Then solve problems 1–8.

Example

Jaden found $\frac{8}{10}$ of a dollar in change in his backpack.
He found $\frac{15}{100}$ of a dollar in change in his lunch bag.
What fraction of a dollar in change did he find altogether?

Multiply to find the hundredths fraction equivalent to $\frac{8}{10}$. $\frac{8}{10} = \left(\frac{8 \times 10}{10 \times 10}\right) = \frac{80}{100}$

Add the hundredths fractions. $\frac{80}{100} + \frac{15}{100} = \frac{95}{100}$

Jaden found $\frac{95}{100}$ of a dollar in change.

1 Write $\frac{2}{10}$ as an equivalent fraction with a denominator of 100.

$\frac{2}{10} = \left(\frac{2 \times 10}{10 \times 10}\right) = \frac{\square}{\square}$

2 Fill in the blanks to show how to find the sum of $\frac{2}{10}$ and $\frac{10}{100}$.

$\frac{\square}{100} + \frac{10}{100} = \frac{\square}{\square}$

3 Look at problem 2. $\frac{10}{100} = \frac{1}{10}$. What is another way that you could show the sum of $\frac{2}{10}$ and $\frac{10}{100}$?

_____

4 Look at problems 2 and 3. Are the sums equivalent? Explain.

_____

_____

Solve.

Mila has 100 math problems to finish this week. She solved $\frac{2}{10}$ of the problems on Monday and $\frac{25}{100}$ of the problems on Tuesday.

5 Did Mila solve more problems on Monday or on Tuesday? Explain.

Show your work.

Solution: _____

_____

6 What fraction of the math problems for the week did Mila solve on Monday and Tuesday?

Show your work.

Solution: _____

7 Look at problem 6. Is the sum you found greater or less than $\frac{1}{2}$? Explain.

_____

_____

8 Has Mila completed more than half of her math problems for the week? Explain.

_____

_____

_____

Name: _____

Fractions as Tenths and Hundredths

Solve the problems.

1 $\frac{3}{10} + \frac{3}{100}$ is equal to which of the following? Circle the letter for all that apply.

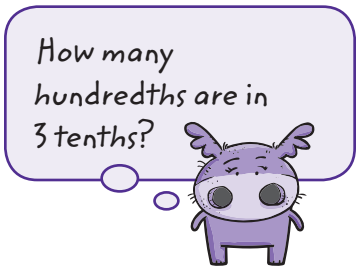
A $\frac{33}{100}$

B $\frac{6}{100}$

C $\frac{60}{100}$

D $\frac{30}{100} + \frac{3}{100}$

E $\frac{3}{10} + \frac{3}{10}$



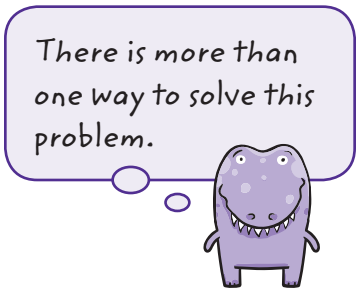
2 Sylvia has $100. She spent $\frac{4}{10}$ of her money on a jacket and $\frac{20}{100}$ of her money on jeans. What fraction of her money did Sylvia spend?

A $\frac{60}{200}$

B $\frac{24}{100}$

C $\frac{6}{10}$

D $\frac{6}{20}$



Josh chose **B** as the correct answer. How did he get that answer?

_____

_____

_____

_____

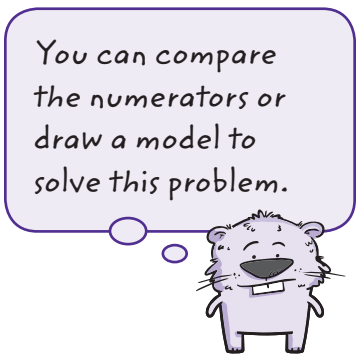
3 Which is greater, $\frac{6}{10}$ or $\frac{6}{100}$? Explain.

_____

_____

_____

_____



Solve.

4 Tell whether each addition problem has a sum greater than $\frac{1}{2}$.

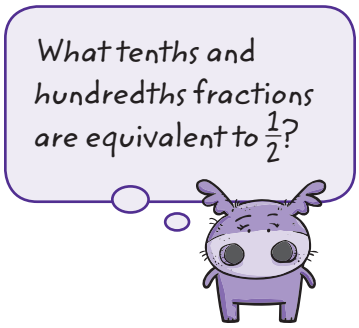
a. $\frac{4}{10} + \frac{9}{100}$ ☐ Yes ☐ No

b. $\frac{1}{100} + \frac{5}{10}$ ☐ Yes ☐ No

c. $\frac{45}{100} + \frac{1}{10}$ ☐ Yes ☐ No

d. $\frac{25}{100} + \frac{3}{10}$ ☐ Yes ☐ No

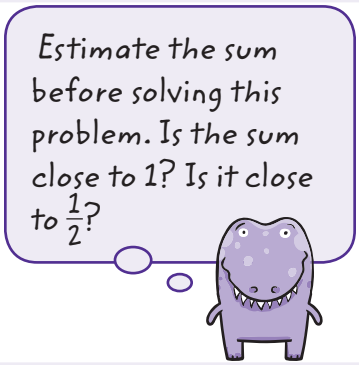
e. $\frac{3}{10} + \frac{15}{100}$ ☐ Yes ☐ No



5 Find the sum of $\frac{2}{100} + \frac{20}{100} + \frac{2}{10}$.

Show your work.

Solution: _____



6 Owen received $100 for his birthday. He wants to spend $\frac{2}{10}$ of his money on a video game. He wants to spend $\frac{55}{100}$ of his money on a skateboard. He wants to spend $\frac{3}{10}$ of his money on comic books. What fraction of his birthday money does Owen want to spend? Does he have enough money? Explain.

Show your work.

Solution: _____

_____

_____