

Set 8: Relate Decimals and Fractions

Add. Show your work for problems 1–3.

1 $\frac{3}{10} + \frac{9}{100}$

2 $\frac{31}{100} + \frac{4}{10}$

3 $\frac{64}{100} + \frac{8}{10}$

Write each decimal as a fraction with a denominator of 100 for problems 4–6.

4 $0.2 = \dots\dots\dots$

5 $0.04 = \dots\dots\dots$

6 $0.56 = \dots\dots\dots$

Write a decimal equivalent for each fraction or mixed number for problems 7–9.

7 $\frac{7}{10} = \dots\dots\dots$

8 $\frac{8}{100} = \dots\dots\dots$

9 $3\frac{14}{100} = \dots\dots\dots$

Set 9: Compare Decimals

Write $<$, $>$, or $=$ in each circle to compare the decimals.

1 $0.2 \bigcirc 0.3$

2 $0.5 \bigcirc 0.05$

3 $0.25 \bigcirc 0.52$

4 $1.46 \bigcirc 2.46$

5 $0.99 \bigcirc 0.9$

6 $0.1 \bigcirc 0.11$

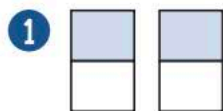
7 $0.2 \bigcirc 0.08$

8 $1.10 \bigcirc 1.1$

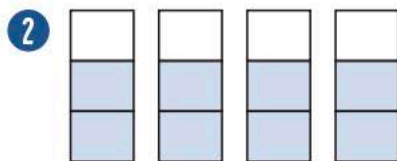
9 $0.72 \bigcirc 0.36$

Set 10: Fraction Multiplication

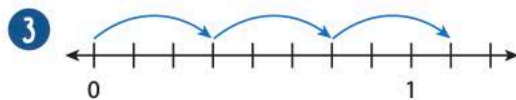
Complete the multiplication equation represented by each model.



$\dots\dots\dots \times \frac{1}{2} = \dots\dots\dots$



$\dots\dots\dots \times \frac{2}{3} = \dots\dots\dots$



$\dots\dots\dots \times \frac{3}{8} = \dots\dots\dots$

Center Activity 4.27 ★★

Find Equivalent Fractions

What You Need

- number cube (1–6)
- 12 game markers in one color for Partner A
- 12 game markers in a different color for Partner B
- Game Board

Check Understanding

What are two equivalent fractions for $\frac{1}{2}$?

What You Do

1. Take turns. Roll the number cube. Look at the table. Find the fraction next to that toss.
2. Cover that fraction with your game marker on the **Game Board**. If that fraction is already taken, your turn ends.
3. Then cover all the fractions on the **Game Board** that are equivalent to your fraction.
4. Repeat until all the fractions are covered. The player with the most markers on the **Game Board** wins.
5. Play again.

Toss	Fraction
1	$\frac{1}{2}$
2	$\frac{3}{4}$
3	$\frac{1}{3}$
4	$\frac{1}{4}$
5	$\frac{2}{3}$
6	Your turn ends.

Go Further!

Roll the number cube. Ask your partner to name an equivalent fraction for that toss.



Find Equivalent Fractions

$\frac{1}{4}$	$\frac{3}{4}$	$\frac{4}{12}$	$\frac{1}{3}$
$\frac{4}{6}$	$\frac{6}{8}$	$\frac{1}{2}$	$\frac{5}{10}$
$\frac{2}{8}$	$\frac{2}{3}$	$\frac{8}{12}$	$\frac{2}{4}$

I can start with any fraction and multiply or divide the numerator and denominator by the same number to get an equivalent fraction.

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



Add and Subtract Mixed Numbers

What You Need

- Recording Sheet

What You Do

1. Take turns. Choose a problem on the **Recording Sheet**.
2. Choose a method to solve the problem.
3. Your partner uses a different method to check the answer.
4. Continue until all the problems on the **Recording Sheet** have been solved.

✓ **Check Understanding**

Add.

$$2\frac{7}{8} + 3\frac{5}{8} = \underline{\hspace{2cm}}$$

Sometimes I use models to add or subtract mixed numbers. Sometimes I use equations.



Go Further!

Write two mixed numbers that have a sum of $4\frac{9}{10}$. Exchange with your partner to check the sum.



Add and Subtract Mixed Numbers

$$8\frac{11}{12} - 7\frac{5}{12} = \underline{\hspace{2cm}}$$

$$2\frac{3}{5} + 3\frac{4}{5} = \underline{\hspace{2cm}}$$

$$4\frac{1}{6} + 8\frac{5}{6} = \underline{\hspace{2cm}}$$

$$3\frac{1}{4} - 1\frac{3}{4} = \underline{\hspace{2cm}}$$

Linda makes fruit punch with $2\frac{3}{8}$ cups of orange juice and $1\frac{2}{8}$ cups of grapefruit juice. How many cups of juice does she use altogether?

_____ cups

Benito walks $1\frac{2}{3}$ miles on a hiking trail. The trail is $3\frac{1}{3}$ miles long. How many more miles does Benito need to walk to reach the end of the trail?

_____ miles