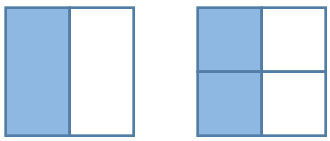
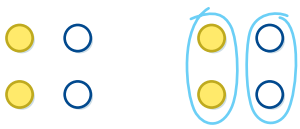
Mid-Chapter Review

Frequently Asked Questions

Q: How can you represent equivalent fractions?



$\frac{1}{2} = \frac{2}{4}$



$\frac{2}{4} = \frac{1}{2}$

A: Equivalent fractions are different names for the same amount. To make equivalent fractions, you can combine or split all of the equal parts of a fraction in the same way. You can also multiply or divide the numerator and denominator of a fraction by the same amount.

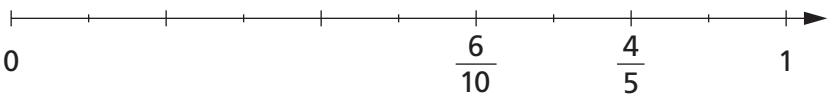
For example, $\frac{1}{2}$ is equivalent to $\frac{2}{4}$.

$\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$ $\quad$ $\frac{2 \div 2}{4 \div 2} = \frac{1}{2}$

Q: How can you compare fractions?

A1: You can use a number line.

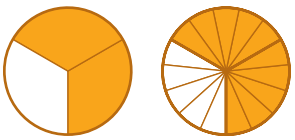
For example, to compare $\frac{4}{5}$ and $\frac{6}{10}$, use a number line with tenths and fifths.



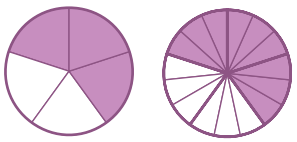
$\frac{4}{5} > \frac{6}{10}$

A2: You can use equivalent fractions.

For example, to compare $\frac{2}{3}$ and $\frac{3}{5}$, split each fraction circle into 15 equal parts.



$\frac{2 \times 5}{3 \times 5} = \frac{10}{15}$



$\frac{3 \times 3}{5 \times 3} = \frac{9}{15}$

$\frac{10}{15} > \frac{9}{15}$, so $\frac{2}{3} > \frac{3}{5}$

Practice

Lesson 1

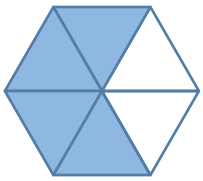
1. Show that the fractions in each pair are equivalent.

a) $\frac{3}{5}$ and $\frac{6}{10}$

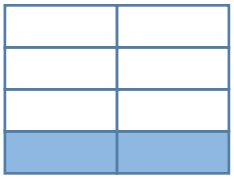
b) $\frac{1}{2}$ and $\frac{4}{8}$

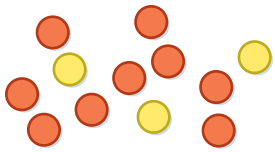
2. Write two equivalent fractions to represent the blue part of each shape.

a)



b)





Lesson 3

3. Use counters to show that $\frac{9}{12}$ is equivalent to $\frac{3}{4}$.

4. Create two equivalent fractions for each fraction. Show your work.

a) $\frac{8}{10}$

b) $\frac{1}{3}$

Lesson 4

5. Kate, Alex, and Molly are in a speed-skating race. Their positions on the track partway through the race are shown in the chart. Who is leading the race? Show your work.

Positions of Speed Skaters

Speed skater	Kate	Alex	Molly
Speed skater's position on track	$\frac{1}{2}$	$\frac{5}{6}$	$\frac{2}{3}$

Lesson 5

6. Compare each pair of fractions using $<$, $>$, or $=$. Explain your strategy.

a) $\frac{5}{8} \square \frac{3}{4}$

b) $\frac{8}{16} \square \frac{16}{32}$

c) $\frac{2}{3} \square \frac{4}{5}$

d) $\frac{1}{4} \square \frac{2}{10}$