Name **Answer Key**

1

Four number cards are shown below.

1	2	7	9

Use two of the cards to

a. make the smallest fraction.

b. make the next smallest fraction.

ANSWER: **a.** $\frac{1}{9}$; **b.** $\frac{1}{7}$

COMMENTS & EXTENSIONS: Challenge students to make all possible fractions using the cards, and write the fractions in order of size.

Use two of the cards to make the largest fraction. [$\frac{9}{1}$]

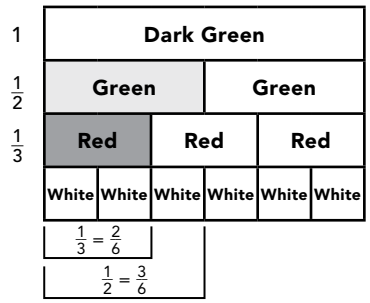
Lesson 1 Compare Unlike Fractions

Name **Answer Key**

Try This

- Use Cuisenaire Rods.
- Build a model for the fractions.
- Add rods to make a common denominator, if necessary.
- Draw and color your model.
- Rewrite the fractions using a common denominator.
- Write >, <, or = in the circles.
- For problems 5–7, compare without building models.

$\frac{1}{2} ? \frac{1}{3}$

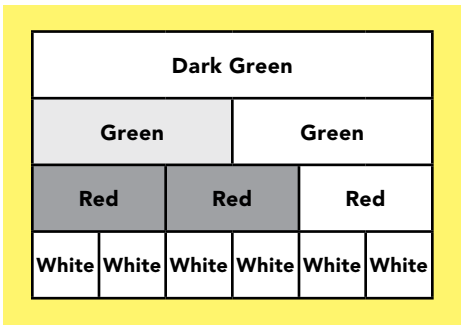


$\frac{1}{2} > \frac{1}{3}$

Using a common denominator: $\frac{3}{6} > \frac{2}{6}$

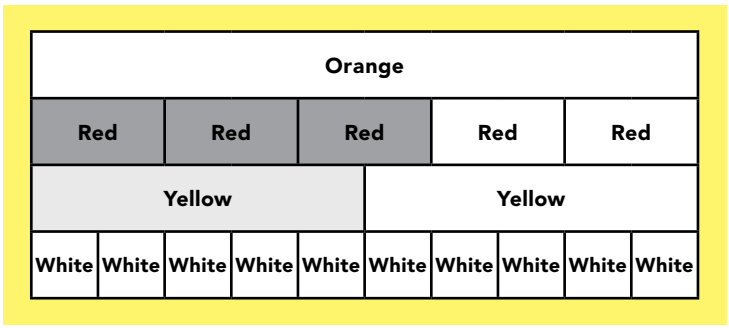
1. $\frac{1}{2} < \frac{2}{3}$

$\frac{3}{6} < \frac{4}{6}$



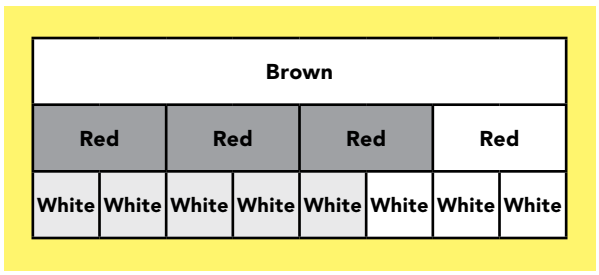
2. $\frac{3}{5} > \frac{1}{2}$

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



3. $\frac{3}{4} > \frac{5}{8}$

$\frac{6}{8} > \frac{5}{8}$



4. $\frac{2}{3} < \frac{7}{9}$

$\frac{6}{9} < \frac{7}{9}$

5. $\frac{5}{6} > \frac{3}{4}$

6. $\frac{2}{3} = \frac{4}{6}$

7. $\frac{3}{8} < \frac{2}{3}$

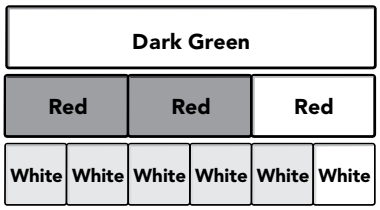
Lesson 1 Compare Unlike Fractions

Name **Answer Key**

Use Cuisenaire Rods to build the model. Rename the fractions to make a common denominator. Compare the fractions. Write >, <, or = in the circles.

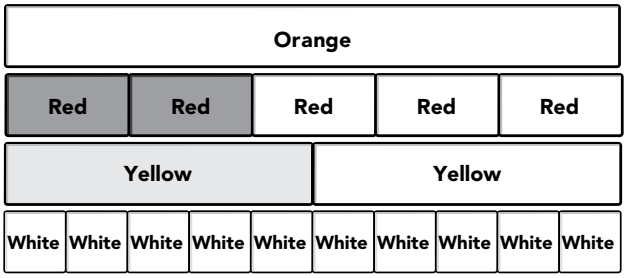
1. $\frac{2}{3} < \frac{5}{6}$

$\frac{4}{6} < \frac{5}{6}$



2. $\frac{2}{5} < \frac{1}{2}$

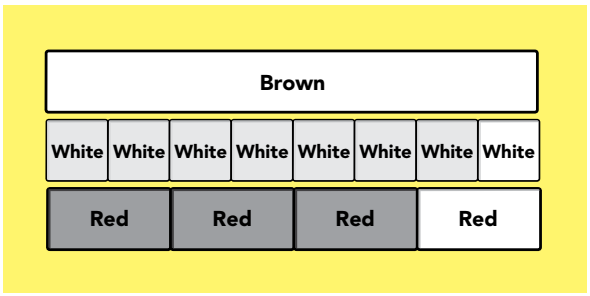
$\frac{4}{10} < \frac{5}{10}$



Use Cuisenaire Rods to model the fractions. Add rods to make a common denominator, if necessary. Draw and color your model. Rewrite the fractions using a common denominator. Write >, <, or = in the circles.

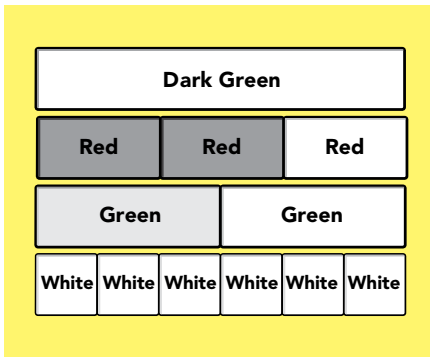
3. $\frac{7}{8} > \frac{3}{4}$

$\frac{7}{8} > \frac{6}{8}$



4. $\frac{2}{3} > \frac{1}{2}$

$\frac{4}{6} > \frac{3}{6}$



Compare the fractions. Write >, <, or =.

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

6. $\frac{3}{4} > \frac{2}{3}$

7. $\frac{7}{12} < \frac{4}{6}$

Name **Answer Key**

2

Suppose you have the following cards:

1	2	3	4	5

Use two cards to make a fraction that is

a. greater than four-fifths.

b. less than one-fifth.

c. more than two.

d. closest to one-sixth.

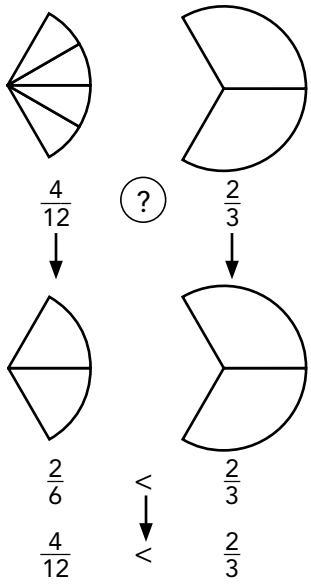
ANSWER: **a.** Possible answers: $\frac{2}{1}$, $\frac{3}{1}$, $\frac{4}{1}$, $\frac{5}{1}$, $\frac{3}{2}$, $\frac{4}{2}$, $\frac{5}{2}$, $\frac{4}{3}$, $\frac{5}{3}$, and $\frac{5}{4}$; **b.** impossible; **c.** $\frac{3}{1}$, $\frac{4}{1}$, $\frac{5}{1}$, and $\frac{5}{2}$; **d.** $\frac{1}{5}$

COMMENTS & EXTENSIONS: Challenge students to use two cards to form various decimals instead of fractions.

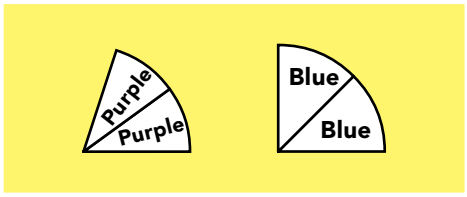
 Name **Answer Key**

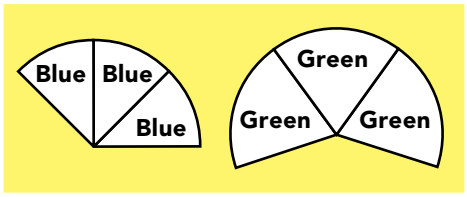
Try This

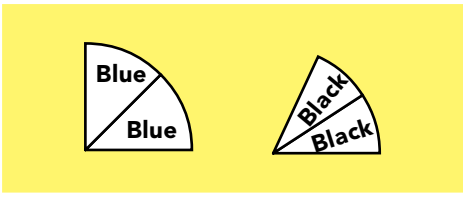
- Use Fraction Circles to model each given fraction.
- Adjust your models so both are made with the same number of pieces.
- Compare the fractions. Write <, >, or = in the circle.
- For problems 1–3, draw and color your adjusted models.
- For problems 4–8, compare without building models.



1. $\frac{1}{5} < \frac{2}{8}$ **2.** $\frac{3}{8} < \frac{6}{10}$ **3.** $\frac{2}{8} > \frac{1}{6}$







4. $\frac{2}{5} > \frac{1}{4}$ **5.** $\frac{1}{3} = \frac{4}{12}$ **6.** $\frac{6}{9} = \frac{2}{3}$ **7.** $\frac{4}{10} < \frac{2}{4}$ **8.** $\frac{9}{12} > \frac{3}{5}$

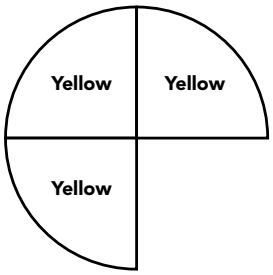
9. When each fraction is represented by the same number of pieces, how do the denominators representing those pieces help you determine which fraction is greater?

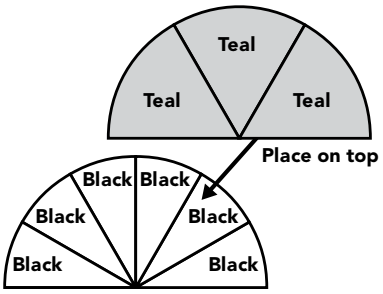
Sample answer: The fraction with the lesser denominator is greater.

 Name **Answer Key**

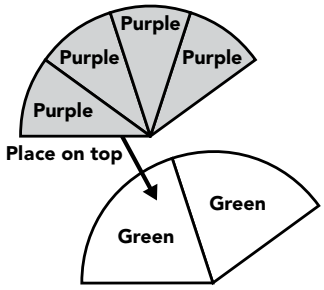
Use Fraction Circles to build the model. Rewrite the fraction with the same denominator. Write <, >, or = in the circle.

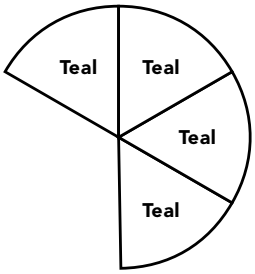
1. $\frac{3}{4}$ (>) $\frac{6}{12}$





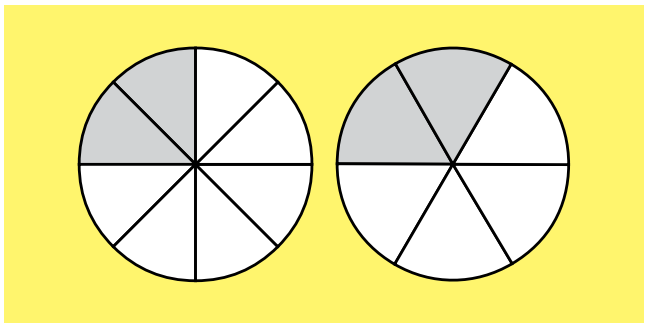
2. $\frac{2}{5}$ (<) $\frac{4}{6}$



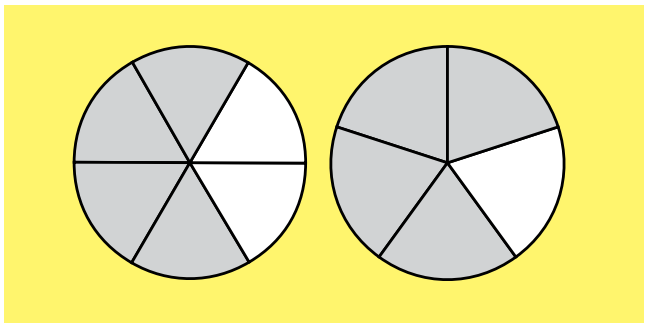


Use Fraction Circles to model each fraction. Then change one model so both use the same number of pieces. Draw the models by shading or coloring the circles. Write <, >, or =.

3. $\frac{2}{8}$ (<) $\frac{1}{3}$



4. $\frac{2}{3}$ (<) $\frac{4}{5}$



Compare the fractions. Write <, >, or =.

5. $\frac{3}{6}$ (=) $\frac{6}{12}$

6. $\frac{2}{8}$ (<) $\frac{1}{2}$

7. $\frac{1}{3}$ (>) $\frac{3}{10}$

8. $\frac{6}{8}$ (>) $\frac{2}{3}$

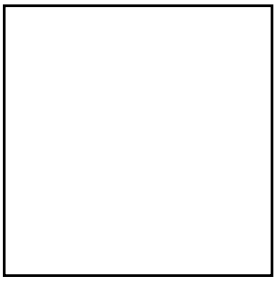
Name **Answer Key**

3

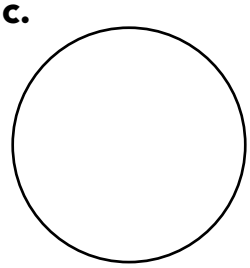
Shade $\frac{1}{4}$ of these figures.

a.

b.

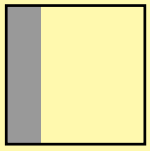


c.

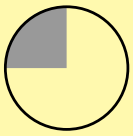


ANSWER: **a.** Sample:

b. Sample:



c. Sample:



COMMENTS & EXTENSIONS: Students have dealt with "half of a half." Now ask them to show $\frac{1}{2}$ of the $\frac{1}{4}$ they have shaded. Can they figure out what part of the whole "half of a fourth" is?

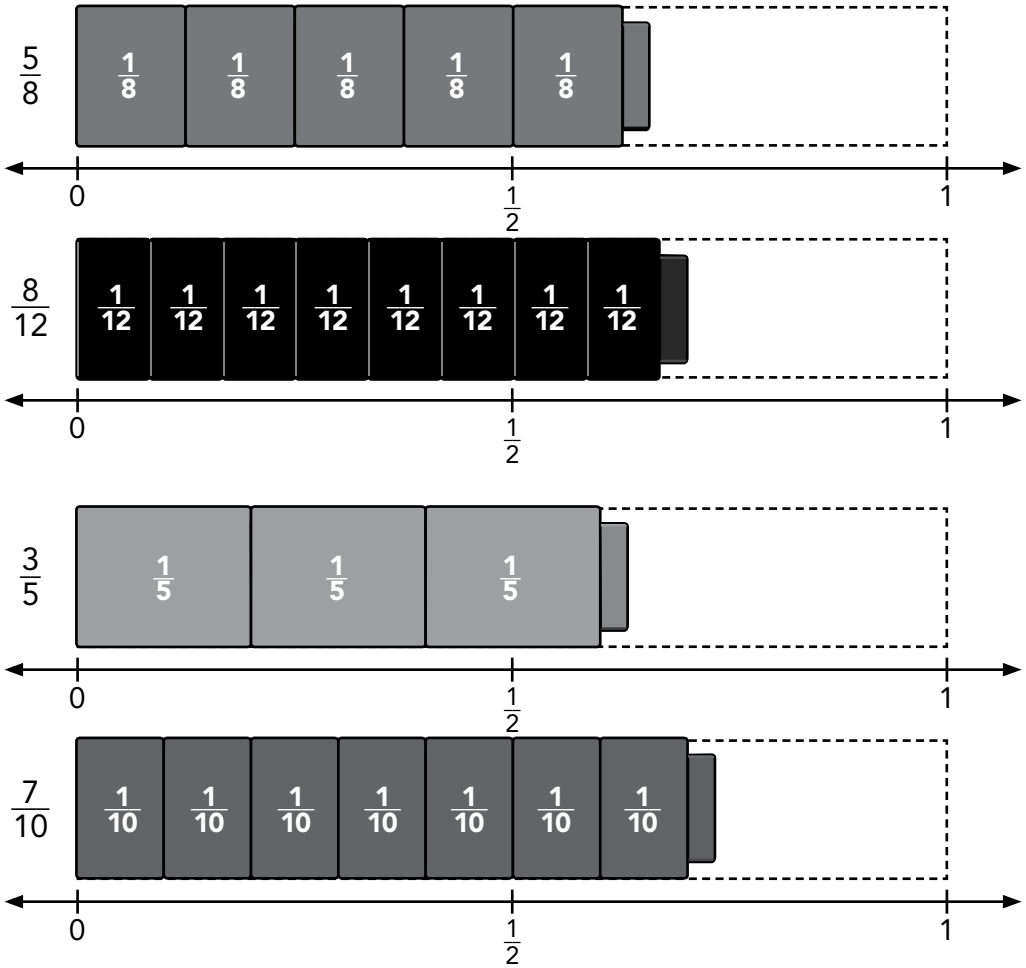
Lesson 3 Compare to One-Half

Name **Answer Key**

Try This

- For problem 1, use Fraction Towers to model the fractions.
- Draw your models on the outlines. Label each fraction piece.
- For problems 2–7, refer to your drawings in problem 1. Write <, >, or = in the ◯.
- For problems 8–10, write <, >, or = in the ◯.

1.



2. $\frac{5}{12} < \frac{1}{2}$

3. $\frac{3}{5} > \frac{1}{2}$

4. $\frac{3}{8} < \frac{7}{10}$

5. $\frac{3}{5} > \frac{3}{8}$

6. $\frac{5}{12} < \frac{3}{5}$

7. $\frac{5}{12} < \frac{7}{10}$

8. $\frac{1}{3} < \frac{3}{5}$

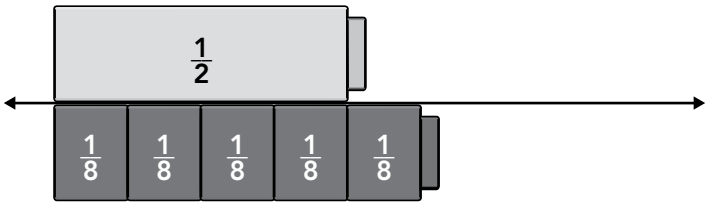
9. $\frac{5}{8} > \frac{1}{3}$

10. $\frac{3}{6} = \frac{5}{10}$

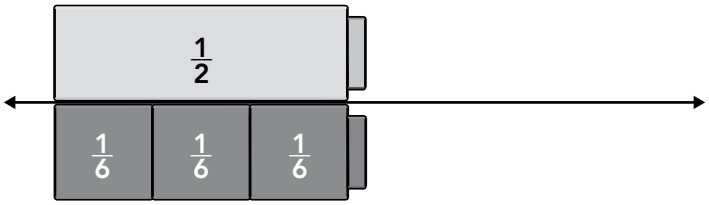
Name **Answer Key**

Use Fraction Towers to build the model on a Fraction Number Line. Compare the fractions. Write <, >, or = in the ◯.

1. $\frac{5}{8}$ (>) $\frac{1}{2}$

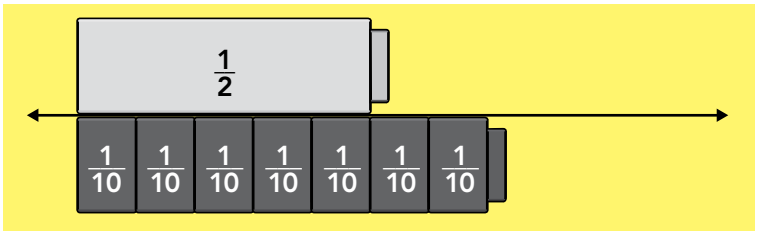


2. $\frac{3}{6}$ (=) $\frac{1}{2}$

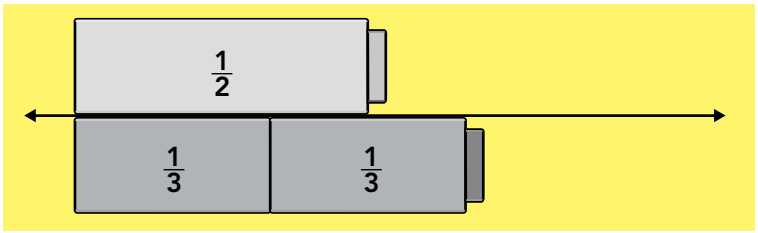


Use Fraction Towers to model the fractions on a Fraction Number Line. Draw your model and compare the fractions. Write <, >, or = in the ◯.

3. $\frac{7}{10}$ (>) $\frac{1}{2}$



4. $\frac{2}{3}$ (>) $\frac{1}{2}$



Compare the fractions. Write <, >, or = in the ◯.

5. $\frac{3}{4}$ (>) $\frac{1}{2}$

6. $\frac{4}{10}$ (<) $\frac{1}{2}$

7. $\frac{4}{10}$ (<) $\frac{3}{4}$

8. $\frac{3}{8}$ (<) $\frac{1}{2}$

9. $\frac{3}{5}$ (>) $\frac{1}{2}$

10. $\frac{3}{5}$ (>) $\frac{3}{8}$

Name **Answer Key**

4

Express the decimals as fractions or mixed numbers.

a. 1.01

b. 0.04

c. 3.5

d. 0.91

ANSWER: **a.** $1\frac{1}{100}$; **b.** $\frac{4}{100}$; **c.** $3\frac{1}{2}$; **d.** $\frac{91}{100}$

COMMENTS & EXTENSIONS: One way to look at the decimal point is merely as a marker for the units place. Another useful way to look at it is as a separator between the whole numbers and fractions of numbers.

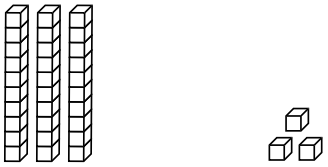
Lesson 4 Compare Decimals

Name **Answer Key**

Try This

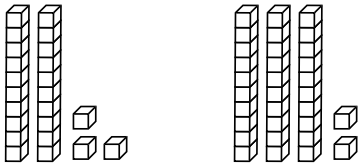
- Use Base Ten Blocks to model each number. Let the flat represent one whole.
- Write the decimal under each picture.
- Write < or > in the ◯.

1.



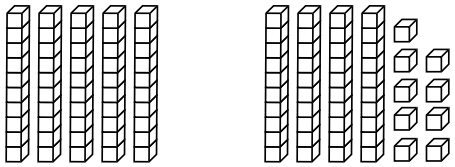
0.3 > 0.03

2.



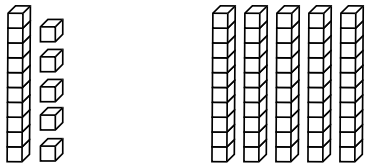
0.23 < 0.32

3.



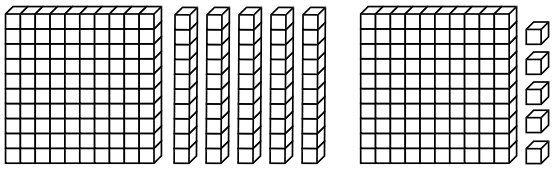
0.5 > 0.49

4.



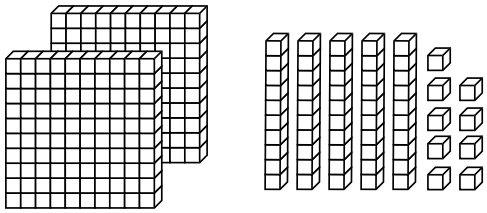
0.15 < 0.5

5.



1.5 > 1.05

6.



2 > 0.59

Write < or > in the ◯.

7. 0.7 > 0.4

8. 0.07 < 0.7

9. 0.6 > 0.48

10. 0.46 > 0.4

11. 0.33 > 0.3

12. 0.7 > 0.08

13. 0.90 > 0.19

14. 0.54 > 0.45

15. 2.83 > 2.38

16. 7.04 < 7.34

17. 4.33 > 4.30

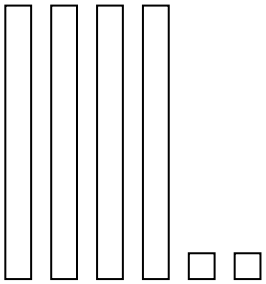
18. 6.3 < 60.3

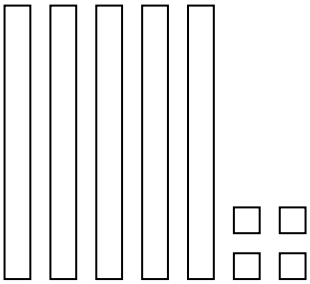
Lesson 4 Compare Decimals

Name **Answer Key**

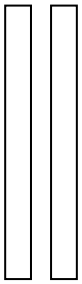
Use Base Ten Blocks to build each model. Let the flat represent one whole. Compare the decimals using >, <, or =.

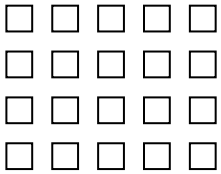
1. 0.42 (<) 0.54





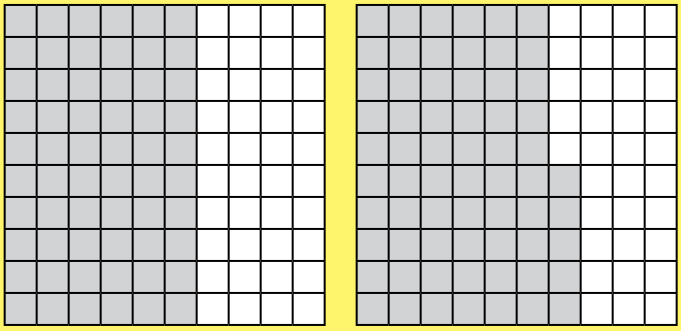
2. 0.2 (=) 0.20



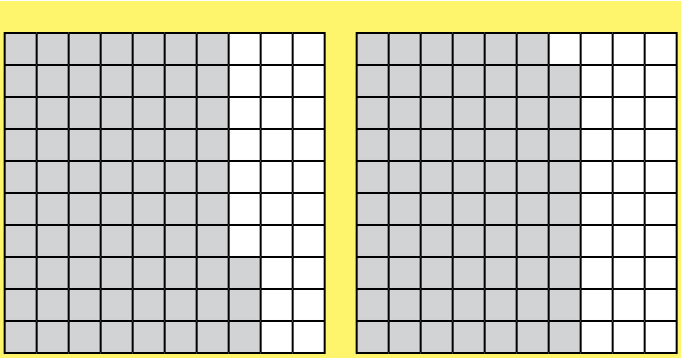


Use Base Ten Blocks to model each decimal. Draw your models on the grids. Compare the decimals using >, <, or =.

3. 0.6 (<) 0.65



4. 0.73 (>) 0.69



Compare the decimals using >, <, or =.

5. 0.28 (<) 0.35

6. 0.82 (>) 0.80

7. 0.75 (<) 0.9

8. 0.54 (>) 0.5

9. 0.64 (>) 0.6

10. 0.5 (=) 0.50