Name _____

Problem Solving • Compare Fractions

PROBLEM SOLVING
Lesson 9.1

COMMON CORE STANDARD CC.3.NF.3d
Develop understanding of fractions as numbers.

Solve.

1. Luis skates $\frac{2}{3}$ mile from his home to school. Isabella skates $\frac{2}{4}$ mile to get to school. Who skates farther?

   Think: Use fraction strips to act it out.

   Luis

2. Sandra makes a pizza. She puts mushrooms on $\frac{2}{8}$ of the pizza. She adds green peppers to $\frac{5}{8}$ of the pizza. Which topping covers more of the pizza?

3. The jars of paint in the art room have different amounts of paint. The green paint jar is $\frac{4}{8}$ full. The purple paint jar is $\frac{4}{6}$ full. Which paint jar is less full?

4. Jan has a recipe for bread. She uses $\frac{2}{3}$ cup of flour and $\frac{1}{3}$ cup of chopped onion. Which ingredient does she use more of, flour or onion?

5. Edward walked $\frac{3}{4}$ mile from his home to the park. Then he walked $\frac{2}{4}$ mile from the park to the library. Which distance is shorter?

Name _____

Compare Fractions with the Same Denominator

COMMON CORE STANDARD CC.3.NF.3d
Develop understanding of fractions as numbers.

Compare. Write <, >, or =.

1. $\frac{3}{4} \bigcirc \frac{1}{4}$ (>)
2. $\frac{3}{6} \bigcirc \frac{0}{6}$
3. $\frac{1}{2} \bigcirc \frac{1}{2}$
4. $\frac{5}{6} \bigcirc \frac{6}{6}$
5. $\frac{7}{8} \bigcirc \frac{5}{8}$
6. $\frac{2}{3} \bigcirc \frac{3}{3}$
7. $\frac{8}{8} \bigcirc \frac{0}{8}$
8. $\frac{1}{6} \bigcirc \frac{1}{6}$
9. $\frac{3}{4} \bigcirc \frac{2}{4}$
10. $\frac{1}{6} \bigcirc \frac{2}{6}$
11. $\frac{1}{2} \bigcirc \frac{0}{2}$
12. $\frac{3}{8} \bigcirc \frac{3}{8}$
13. $\frac{1}{4} \bigcirc \frac{4}{4}$
14. $\frac{5}{8} \bigcirc \frac{4}{8}$
15. $\frac{4}{6} \bigcirc \frac{6}{6}$

Problem Solving REAL WORLD

16. Ben mowed $\frac{5}{6}$ of his lawn in one hour. John mowed $\frac{4}{6}$ of his lawn in one hour. Who mowed less of his lawn in one hour?

_____

17. Darcy baked 8 muffins. She put blueberries in $\frac{5}{8}$ of the muffins. She put raspberries in $\frac{3}{8}$ of the muffins. Did more muffins have blueberries or raspberries?

_____

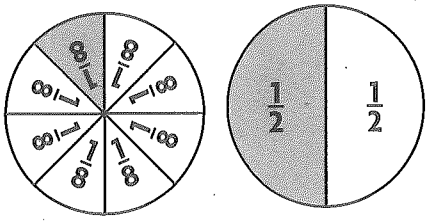
Name _____

Compare Fractions with the Same Numerator

COMMON CORE STANDARD CC.3.NF.3d
Develop understanding of fractions as numbers.

Compare. Write <, >, or =.

1. $\frac{1}{8} \bigcirc \frac{1}{2}$



2. $\frac{3}{8} \bigcirc \frac{3}{6}$

3. $\frac{2}{3} \bigcirc \frac{2}{4}$

4. $\frac{2}{8} \bigcirc \frac{2}{3}$

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

6. $\frac{1}{2} \bigcirc \frac{1}{6}$

7. $\frac{5}{6} \bigcirc \frac{5}{8}$

8. $\frac{4}{8} \bigcirc \frac{4}{8}$

9. $\frac{6}{8} \bigcirc \frac{6}{6}$

Problem Solving REAL WORLD

10. Javier is buying food in the lunch line. The tray of salad plates is $\frac{3}{8}$ full. The tray of fruit plates is $\frac{3}{4}$ full. Which tray is more full?

_____

11. Rachel bought some buttons. Of the buttons, $\frac{2}{4}$ are yellow and $\frac{2}{8}$ are red. Rachel bought more of which color buttons?

_____

Name _____

Compare Fractions

COMMON CORE STANDARD CC.3.NF.3d
Develop an understanding of fractions as numbers.

Compare. Write <, >, or =. Write the strategy you used.

1. $\frac{3}{8} \bigcirc \frac{3}{4}$

   Think: The numerators are the same. Compare the denominators. The greater fraction will have the lesser denominator.

   same numerator

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

3. $\frac{3}{4} \bigcirc \frac{1}{4}$

Name a fraction that is less than or greater than the given fraction. Draw to justify your answer.

4. greater than $\frac{1}{3}$ —

5. less than $\frac{3}{4}$ —

Problem Solving REAL WORLD

6. At the third-grade party, two groups each had their own pizza. The blue group ate $\frac{7}{8}$ pizza. The green group ate $\frac{2}{8}$ pizza. Which group ate more of their pizza?

7. Ben and Antonio both take the same bus to school. Ben's ride is $\frac{7}{8}$ mile. Antonio's ride is $\frac{3}{4}$ mile. Who has a longer bus ride?

Name _____

Compare and Order Fractions

COMMON CORE STANDARD CC.3.NF.3d
Develop understanding of fractions as numbers.

Write the fractions in order from greatest to least.

1. $\frac{4}{4}, \frac{1}{4}, \frac{3}{4}$ $\frac{4}{4}$, $\frac{3}{4}$, $\frac{1}{4}$

Think: The denominators are the same, so compare the numerators: $4 > 3 > 1$.

2. $\frac{2}{8}, \frac{5}{8}, \frac{1}{8}$ _____, _____, _____

3. $\frac{1}{3}, \frac{1}{6}, \frac{1}{2}$ _____, _____, _____

4. $\frac{2}{3}, \frac{2}{6}, \frac{2}{8}$ _____, _____, _____

Write the fractions in order from least to greatest.

5. $\frac{2}{4}, \frac{4}{4}, \frac{3}{4}$ _____, _____, _____

6. $\frac{4}{6}, \frac{5}{6}, \frac{2}{6}$ _____, _____, _____

7. $\frac{7}{8}, \frac{0}{8}, \frac{3}{8}$ _____, _____, _____

8. $\frac{3}{4}, \frac{3}{6}, \frac{3}{8}$ _____, _____, _____

Problem Solving REAL WORLD

9. Mr. Jackson ran $\frac{7}{8}$ mile on Monday. He ran $\frac{3}{8}$ mile on Wednesday and $\frac{5}{8}$ mile on Friday. On which day did Mr. Jackson run the shortest distance?

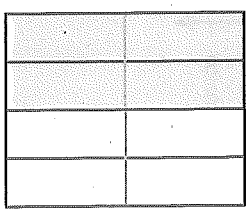
10. Delia has three pieces of ribbon. Her red ribbon is $\frac{2}{4}$ foot long. Her green ribbon is $\frac{2}{3}$ foot long. Her yellow ribbon is $\frac{2}{6}$ foot long. She wants to use the longest piece for a project. Which color ribbon should Delia use?

Name _____

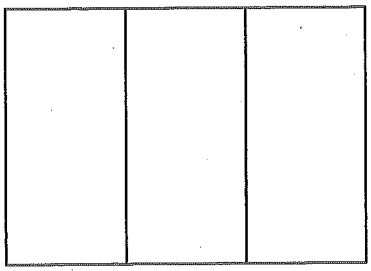
Model Equivalent Fractions

COMMON CORE STANDARD CC.3.NF.3a
Develop understanding of fractions as numbers.

Shade the model. Then divide the pieces to find the equivalent fraction.

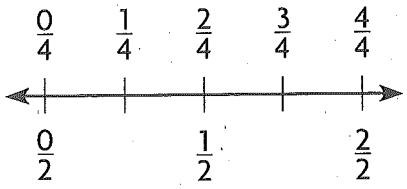
1. 

$\frac{2}{4} = \frac{4}{8}$

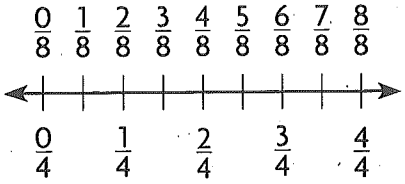
2. 

$\frac{1}{3} = \frac{\square}{6}$

Use the number line to find the equivalent fraction.

3. 

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

4. 

$\frac{3}{4} = \frac{\square}{8}$

Problem Solving REAL WORLD

5. Mike says that $\frac{3}{3}$ of his fraction model is shaded blue. Ryan says that $\frac{6}{6}$ of the same model is shaded blue. Are the two fractions equivalent? If so, what is another equivalent fraction?

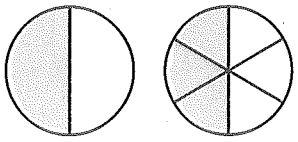
6. Brett shaded $\frac{4}{8}$ of a sheet of notebook paper. Aisha says he shaded $\frac{1}{2}$ of the paper. Are the two fractions equivalent? If so, what is another equivalent fraction?

Name _____

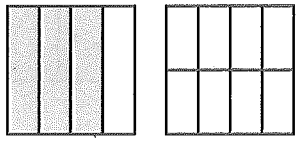
Equivalent Fractions

COMMON CORE STANDARD CC.3.NF.3b
Develop understanding of fractions as numbers.

Each shape is 1 whole. Shade the model to find the equivalent fraction.

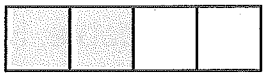
1. 

$\frac{1}{2} = \frac{3}{6}$

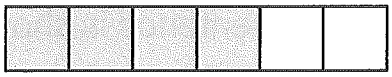
2. 

$\frac{3}{4} = \frac{6}{\square}$

Circle equal groups to find the equivalent fraction.

3. 

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

4. 

$\frac{4}{6} = \frac{\square}{3}$

Problem Solving REAL WORLD

5. May painted 4 out of 8 equal parts of a poster board blue. Jared painted 2 out of 4 equal parts of a same-size poster board red. Write fractions to show which part of the poster board each person painted.

_____

6. Are the fractions equivalent? Draw a model to explain.

_____

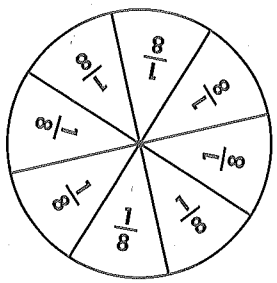
Name _____

Chapter 9 Extra Practice

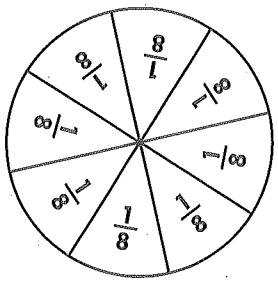
Lesson 9.1

Solve. Show your work.

1. Nick finished $\frac{4}{8}$ of his homework before dinner. Ed finished $\frac{7}{8}$ of his homework before dinner. Who finished the greater part of his homework?



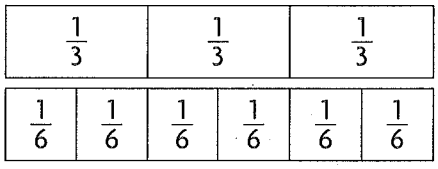
Nick



Ed

_____

2. Rafael walked $\frac{2}{3}$ mile and then rode his scooter $\frac{2}{6}$ mile. Which distance is farther?



_____ mile is farther.

Lessons 9.2 - 9.3

Compare. Write <, >, or =.

1. $\frac{2}{6} \bigcirc \frac{3}{6}$

2. $\frac{6}{8} \bigcirc \frac{1}{8}$

3. $\frac{3}{8} \bigcirc \frac{3}{4}$

4. $\frac{1}{6} \bigcirc \frac{1}{8}$

5. $\frac{2}{3} \bigcirc \frac{2}{6}$

6. $\frac{1}{8} \bigcirc \frac{3}{8}$

Lesson 9.4

Compare. Write <, >, or =. Write the strategy you used.

1. $\frac{2}{8} \bigcirc \frac{2}{3}$

2. $\frac{5}{6} \bigcirc \frac{1}{6}$

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

_____ _____ _____

_____ _____ _____