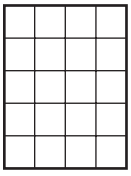
Name _____ Date _____

Extension
Lesson 1

Exploring Fractions

1 

Perimeter: ☐ units

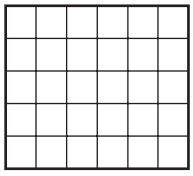
Area: ☐ sq units

$\frac{1}{5}$ of the area is _____ square units

$\frac{2}{5}$ of the area is _____ square units

$\frac{3}{5}$ of the area is _____ square units

$\frac{4}{5}$ of the area is _____ square units

2 

Perimeter: ☐ units

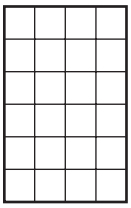
Area: ☐ sq units

$\frac{1}{5}$ of the area is _____ square units

$\frac{2}{5}$ of the area is _____ square units

$\frac{3}{5}$ of the area is _____ square units

$\frac{6}{5}$ of the area is _____ square units

3 

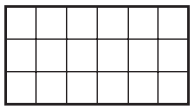
Perimeter: ☐ units

Area: ☐ sq units

$\frac{1}{8}$ of the area is _____ square units

$\frac{3}{8}$ of the area is _____ square units

$\frac{6}{8}$ of the area is _____ square units

4 

Perimeter: ☐ units

Area: ☐ sq units

$\frac{1}{6}$ of the area is _____ square units

$\frac{3}{6}$ of the area is _____ square units

$\frac{5}{6}$ of the area is _____ square units

5 Separate the group of stars into thirds.

_____ stars are in $\frac{1}{3}$ of the group.

_____ stars are in $\frac{2}{3}$ of the group.

_____ stars are in $\frac{3}{3}$ of the group.

_____ stars are in $\frac{4}{3}$ of the group.

6 Divide the segment into fourths.

If the line segment were 4 inches long, how long would $\frac{1}{4}$ of it be? _____

If the line segment were 16 inches long, how long would $\frac{1}{4}$ of it be? _____

Name _____ Date _____

Extension
Lesson 2

Exploring Fractions Greater than 1

Try these problems. You can use pattern blocks if they help.

1. If 

is 5, then what is 

? _____

2. If 

is 32, then what is 

? _____

3. If 

is 5, then what is 

? _____

4. If 

is 6, then what is 

? _____

5. If 

is $4\frac{1}{2}$, then what is 

? _____

6. If 

is 5, then what is 

? _____

7. If 

is 1, then what is 

? _____

8. If 

is 2, then what is 

? _____

9. If 

is 3, then what is 

? _____

10. If 

is $1\frac{1}{2}$, then what is 

? _____

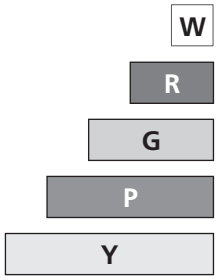
Name _____ Date _____

Extension
Lesson 3

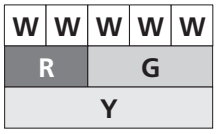
Exploring Fractions with Cuisenaire® Rods

To complete the number sentences, refer to these Cuisenaire® Rods.

The yellow rod equals 1.



1



$$\frac{2}{5} + \frac{3}{5} = \frac{\square}{\square}$$

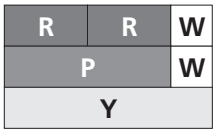
2

$$\frac{2}{5} + \frac{2}{5} + \frac{1}{5} = \frac{\square}{\square}$$

3

$$\frac{3}{5} + \frac{1}{5} = \frac{\square}{\square}$$

4



$$\frac{4}{5} + \frac{\square}{\square} = \frac{5}{5}$$

5

$$\frac{4}{5} + \frac{2}{5} = \frac{\square}{\square}$$

6

$$\frac{3}{5} + \frac{4}{5} = \frac{\square}{\square}$$

Name _____ Date _____

Extension
Lesson 4

Reasoning about Cuisenaire® Rod Fractions

Nick's recipe for trail mix calls for:

1 c granola

$\frac{1}{2}$ c dried apricots

$\frac{2}{3}$ c sunflower seeds

$\frac{3}{4}$ c raisins

$\frac{1}{4}$ c chocolate chips

Nick decided to make one batch of trail mix. He looked to see if he had what he needed. This is what he found in his kitchen:

$\frac{9}{8}$ c granola

$\frac{4}{8}$ c dried apricots

$\frac{1}{3}$ c sunflower seeds

$\frac{3}{8}$ c raisins

$\frac{1}{3}$ c chocolate chips

1. Which ingredients does he NOT have enough of? _____

2. With the ingredients that Nick already has, how much trail mix can he make? _____

3. How much of each ingredient will Nick use?

_____

_____

4. How much granola will Nick have left? _____

5. Which other ingredients will Nick NOT use up completely?

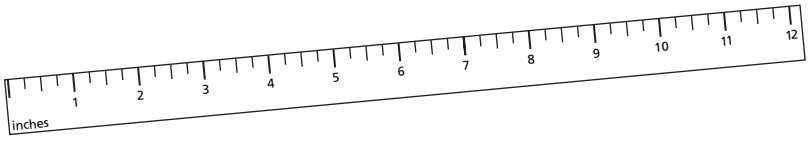
_____

Name _____ Date _____

Extension
Lesson 5

Fractions of a Foot

Use an inch ruler to solve.



12 inches = 1 foot **1 yard = 3 feet**

1. $\frac{1}{2}$ foot = _____ inches
2. $\frac{1}{4}$ foot = _____ inches
3. $\frac{1}{3}$ foot = _____ inches
4. _____ foot = 1 inch
5. _____ foot = 5 inches
6. _____ foot = 2 inches
7. 1 yard = _____ inches
8. $\frac{1}{2}$ yard = _____ inches
9. $\frac{1}{3}$ yard = _____ inches
10. _____ yard = 1 inch
11. _____ yard = 5 inches
12. _____ yard = 24 inches

13. $\frac{1}{3}$ yard + $\frac{1}{6}$ yard = _____ inches

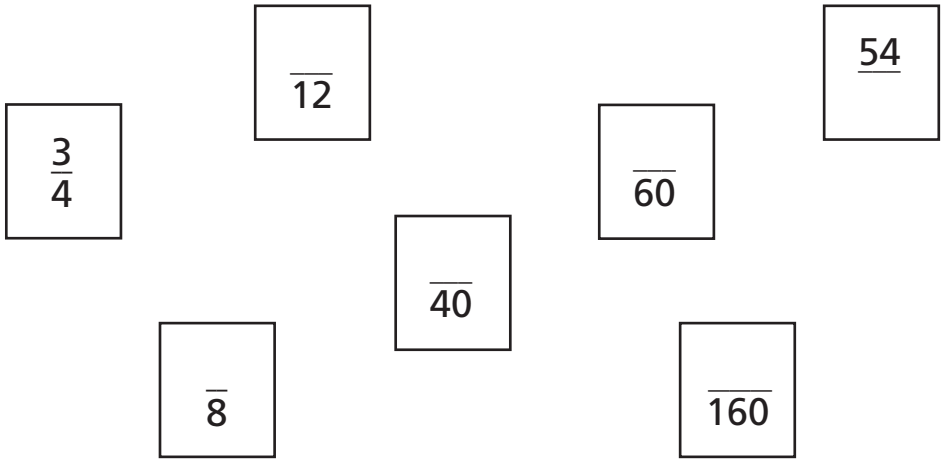
14. $\frac{1}{3}$ yard + $\frac{1}{2}$ yard + $\frac{1}{6}$ yard = _____ inches

Name _____ Date _____

Extension
Lesson 6

Comparing Fractions with One Half

Complete each fraction so that it equals $\frac{3}{4}$.



Use <, >, or = to compare the fractions.

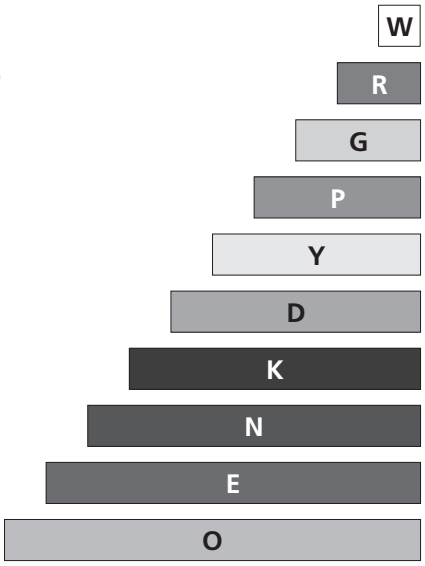
1. $\frac{1}{2}$ ◯ $\frac{3}{4}$
2. $\frac{2}{2}$ ◯ $\frac{3}{4}$
3. $\frac{3}{2}$ ◯ $\frac{3}{4}$
4. $\frac{7}{8}$ ◯ $\frac{3}{4}$
5. $\frac{1}{8}$ ◯ $\frac{3}{4}$
6. $\frac{6}{8}$ ◯ $\frac{3}{4}$
7. $\frac{7}{15}$ ◯ $\frac{3}{4}$
8. $\frac{14}{15}$ ◯ $\frac{3}{4}$
9. $\frac{8}{15}$ ◯ $\frac{3}{4}$

Name _____ Date _____

Extension
Lesson 7

Comparing Fractions

Draw two Cuisenaire® Rods to represent the fractions. In all of the problems, the orange rod is equal to 1. You can use Cuisenaire® Rods if you need help.



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

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

3. $\frac{9}{10}$

4. $\frac{4}{5}$

5. $\frac{12}{20}$

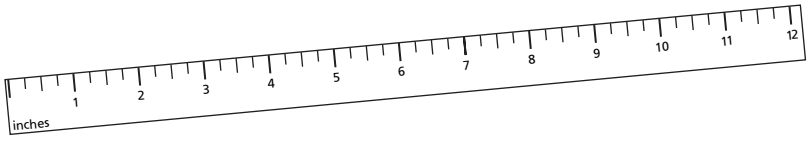
6. $\frac{20}{50}$

Name _____ Date _____

Extension
Lesson 8

Finding Equivalent Fractions

Use an inch ruler to solve.



1. $\frac{1}{6}$ of a foot is _____ inches. $\frac{2}{12}$ of a foot is also 2 inches.

2. $\frac{2}{6}$ of a foot is _____ inches. _____ of a foot is also _____ inches.

3. $\frac{3}{6}$ of a foot is _____ inches. _____ of a foot is also _____ inches.

4. $\frac{6}{6}$ of a foot is _____ inches. _____ of a foot is also _____ inches.

5. $\frac{7}{6}$ of a foot is _____ inches. _____ of a foot is also _____ inches.

Name _____ Date _____

Extension
Lesson 9

Making Equivalent Fractions

Complete the sentences.

1. $\frac{9}{18} = \frac{1}{\square}$

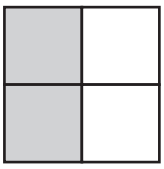
2. $\frac{9}{27} = \frac{1}{\square}$

3. $\frac{6}{8} = \frac{3}{\square}$

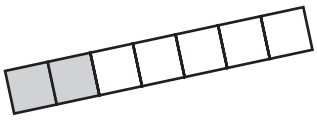
4. $\frac{15}{75} = \frac{5}{\square}$

5. $\frac{3}{21} = \frac{1}{\square}$

6. $\frac{18}{30} = \frac{3}{\square}$

7. 

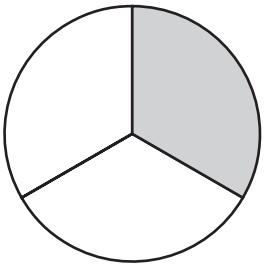
Half of $\frac{1}{2}$ is _____.

8. 

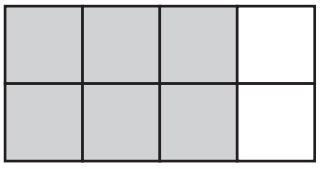
Half of $\frac{2}{7}$ is _____.

9. 

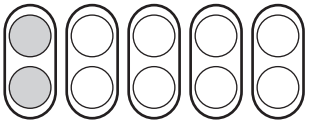
Half of 3 is _____.

10. 

Half of $\frac{1}{3}$ is _____.

11. 

Half of $\frac{3}{4}$ is _____.

12. 

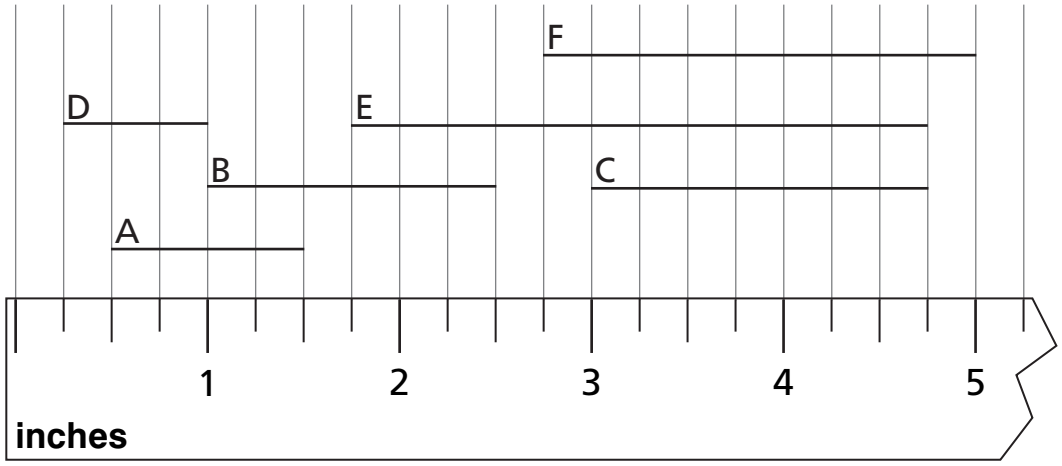
Half of $\frac{1}{5}$ is _____.

Name _____ Date _____

Extension
Lesson 10

Fractions in Measurement

Record the lengths of these lines.



Lengths:

A: _____ inches **C:** _____ inches **E:** _____ inches

B: _____ inches **D:** _____ inches **F:** _____ inches

Sums of lengths:

A and **B:** _____ inches **D** and **E:** _____ inches

B and **C:** _____ inches **E** and **F:** _____ inches

Differences between lengths:

B and **D:** _____ inches **E** and **F:** _____ inches

B and **A:** _____ inches **C** and **D:** _____ inches

Name _____ Date _____

Extension
Lesson 11

Modeling Addition of Fractions

Make $\frac{2}{3}$ in as many ways as you can. Record your number sentences below. Use the back of the page if you have ideas for more number sentences.

1. $\frac{\square}{\square} + \frac{\square}{\square} = \frac{2}{3}$

2. $\frac{\square}{\square} - \frac{\square}{\square} = \frac{2}{3}$

3. $\frac{\square}{\square} + \frac{\square}{\square} = \frac{2}{3}$

4. $\frac{\square}{\square} - \frac{\square}{\square} = \frac{2}{3}$

5. $\frac{\square}{\square} = \frac{2}{3}$

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

7. $\frac{\square}{\square} = \frac{2}{3}$

8. $\frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} = \frac{2}{3}$

9. $\frac{\square}{\square} - \frac{\square}{\square} - \frac{\square}{\square} = \frac{2}{3}$