

*Monday = At your Seat*

## Guy Who Thought He Was a Wigwam One Day and a Teepee the Next?

Circle one fraction in each set. Notice the letter above it. Write this letter in the box at the bottom of the page that contains the exercise number.

I. Circle the fraction that is equivalent to the first fraction in the set.

1

	G	T	V
$\frac{1}{3}$	$\frac{2}{9}$	$\frac{4}{12}$	$\frac{5}{18}$

2

	I	P	O
$\frac{2}{5}$	$\frac{6}{12}$	$\frac{18}{40}$	$\frac{14}{35}$

3

	F	M	E
$\frac{3}{4}$	$\frac{9}{16}$	$\frac{21}{32}$	$\frac{15}{20}$

4

	A	W	L
$\frac{5}{8}$	$\frac{30}{48}$	$\frac{20}{24}$	$\frac{45}{64}$

5

	K	S	C
$\frac{4}{9}$	$\frac{2}{3}$	$\frac{12}{27}$	$\frac{28}{72}$

6

	B	E	R
$\frac{6}{7}$	$\frac{7}{8}$	$\frac{48}{56}$	$\frac{24}{35}$

7

	N	F	U
$\frac{7}{10}$	$\frac{42}{50}$	$\frac{6}{9}$	$\frac{70}{100}$

8

	T	A	O
$\frac{5}{12}$	$\frac{20}{48}$	$\frac{10}{36}$	$\frac{30}{84}$

9

	H	T	E
$\frac{1}{2}$	$\frac{7}{15}$	$\frac{16}{30}$	$\frac{12}{24}$

II. Circle the fraction that is in lowest terms.

10

V	I	U	M
$\frac{5}{10}$	$\frac{6}{9}$	$\frac{3}{8}$	$\frac{2}{6}$

11

N	Y	L	S
$\frac{4}{8}$	$\frac{2}{9}$	$\frac{15}{25}$	$\frac{10}{14}$

12

G	P	O	A
$\frac{6}{8}$	$\frac{3}{9}$	$\frac{7}{12}$	$\frac{20}{45}$

13

D	T	L	R
$\frac{4}{12}$	$\frac{9}{15}$	$\frac{2}{4}$	$\frac{5}{6}$

14

P	B	N	S
$\frac{12}{18}$	$\frac{7}{14}$	$\frac{9}{12}$	$\frac{8}{15}$

15

T	H	F	Y
$\frac{10}{21}$	$\frac{4}{32}$	$\frac{6}{10}$	$\frac{15}{24}$

16

C	J	G	W
$\frac{8}{22}$	$\frac{9}{16}$	$\frac{10}{35}$	$\frac{3}{12}$

17

E	I	R	O
$\frac{6}{15}$	$\frac{7}{42}$	$\frac{11}{33}$	$\frac{12}{25}$

18

N	D	K	X
$\frac{4}{5}$	$\frac{12}{16}$	$\frac{15}{36}$	$\frac{2}{8}$

11	2	7	4	13	6	16	10	14	1	8	17	12	15	3	18	5	9
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# Fractions/Decimals Worksheet

Write the following fractions as decimals.

1 a.  $4\frac{8}{10} =$

1 b.  $7\frac{2}{10} =$

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

2 b.  $4\frac{14}{25} =$

3 a.  $2\frac{14}{20} =$

3 b.  $\frac{18}{20} =$

4 a.  $9\frac{4}{5} =$

4 b.  $8\frac{8}{50} =$

5 a.  $\frac{8}{10} =$

5 b.  $\frac{8}{100} =$

6 a.  $\frac{6}{10} =$

6 b.  $9\frac{30}{100} =$

7 a.  $2\frac{2}{4} =$

7 b.  $3\frac{3}{5} =$

8 a.  $7\frac{6}{10} =$

8 b.  $7\frac{16}{100} =$

9 a.  $8\frac{1}{2} =$

9 b.  $9\frac{33}{50} =$



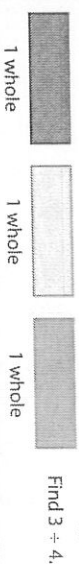
# Lesson 9-2

Understanding it: Fractions can be used to represent division.

## Fractions and Division

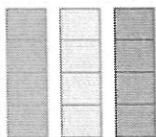
How can fractions be used to show division?

Al, Lisa, Nico, and Laura are making a collage. They will share 3 rectangular strips of colored paper. What fraction represents the part of a whole strip of paper each will get?

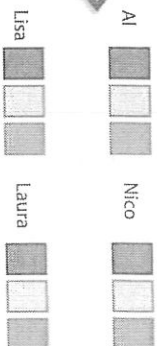


*Tues At your Seat*

One way to divide 3 wholes into 4 equal parts is to first divide each whole into 4 equal parts. Each part is  $\frac{1}{4}$  of a whole.



Rearrange the  $\frac{1}{4}$  pieces. Each person gets 3 of the  $\frac{1}{4}$  pieces. Each gets  $\frac{3}{4}$ . So  $3 \div 4 = \frac{3}{4}$ .



### Another Example How can you use a number line to represent fractions?

One way to find a point on a number line that represents a fraction is to divide a unit segment (0 to 1) into equal parts. To find  $\frac{4}{5}$ , divide the segment into 5 equal parts.

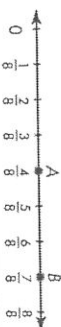


Then find the point  $\frac{4}{5}$  of the way from 0 to 1.

#### Explain It

1. Explain how you would find the fraction  $\frac{3}{5}$  on the number line above.

2. What fraction is shown by Point A below? Point B?



*Do # 1-20*

### Guided Practice

#### Do you know HOW?

Give each answer as a fraction.

- $1 \div 2$
- $1 \div 4$
- $9 \div 10$
- $5 \div 8$
- $3 \div 4$
- $7 \div 9$
- $7 \div 11$
- $3 \div 6$

#### Do you UNDERSTAND?

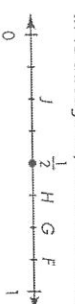
- How can you represent  $\frac{3}{4}$  on a number line?
- Four friends want to share three loaves of bread. One student suggests that each of three loaves be divided into 4 equal parts. If each person gets 3 of the parts, how much of a whole loaf does each person get in all?

### Independent Practice

In 11 through 14, write each as a fraction. Then show each on a number line.

- $1 \div 3$
- $2 \div 3$
- $3 \div 4$
- $1 \div 2$

In 15 through 18, use the number line to name each point with a fraction.



- F
- G
- H
- J

#### Problem Solving

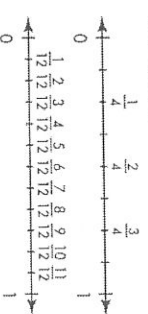
19. Algebra Which expression represents "30 subtracted from a number"?

- $30n$
- $30 - n$
- $30 + n$
- $n - 30$

20. Think About the Process There are 6 pieces of construction paper for 7 people. Each person needs an equal amount. What is the first step to divide the construction paper?

- Cut each piece of construction paper into 6 equal parts.
- Cut each piece of construction paper into 7 equal parts.
- Cut each piece of construction paper into 13 equal parts.
- Cut each piece of construction paper into 42 equal parts.

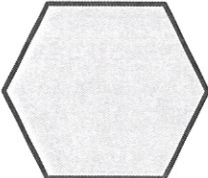
21. Which fraction is closer to  $1\frac{3}{4}$  or  $\frac{5}{12}$ ? Use the number lines below to justify your answer.





Tues. Review Center

## Frantic Fractions Pattern Block Challenge #1


If  = 1 whole...

Then:

1. Create a design worth  $3\frac{1}{2}$ .
2. Trace your design.
3. Color it to match the pattern blocks you used.
4. "Convince Me" that your design is worth  $3\frac{1}{2}$ .

## Frantic Fractions

### Pattern Block Challenge #2

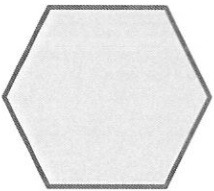
If  = 1 whole...

Then:

1. Create a design worth  $5\frac{1}{2}$ .
2. Trace your design.
3. Color it to match the pattern blocks you used.
4. "Convince Me" that your design is worth  $5\frac{1}{2}$ .

# Frantic Fractions

## Pattern Block Challenge #11

If  = 1 whole...

Then:

1. Create a design worth  $\frac{11}{6}$ .
2. Trace your design.
3. Color it to match the pattern blocks you used.
4. "Convince Me" that your design is worth  $\frac{11}{6}$ .

## Frantic Fractions

### Pattern Block Challenge #14

If  = 1 whole...

Then:

1. Create a design worth  $\frac{2}{3}$ .
2. Trace your design.
3. Color it to match the pattern blocks you used.
4. "Convince Me" that your design is worth  $\frac{2}{3}$ .





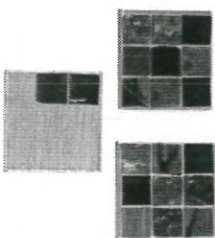
# Lesson 9-3

Understand fractions greater than or equal to 1 can be represented by a mixed number.

## Mixed Numbers and Improper Fractions

How are mixed numbers and improper fractions related?

Jack has 20 square tiles. He uses them to cover box lids with 3 rows of 3 square tiles. What number can name the total region covered by the tiles?



### Guided Practice\*

#### Do you know HOW?

Write each improper fraction as a mixed number or each mixed number as an improper fraction.

1.  $\frac{3}{2}$
2.  $2\frac{3}{4}$
3.  $3\frac{1}{4}$
4.  $\frac{7}{6}$
5.  $9\frac{1}{10}$
6.  $\frac{21}{2}$

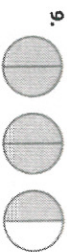
#### Do you UNDERSTAND?

7. What is a general rule for writing a mixed number as an improper fraction?

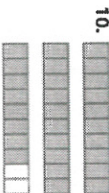
8. Writing to Explain Simone thinks that  $\frac{8}{4}$  is not an improper fraction because  $8 \div 4 = 2$ . Is she correct? Explain.

### Independent Practice

In 9 and 10, write an improper fraction and a mixed number for the model.



9.



10.

11.  $\frac{4}{2}$
12.  $\frac{3}{2}$
13.  $4\frac{9}{10}$
14.  $\frac{5}{4}$
15.  $\frac{22}{3}$
16.  $\frac{5}{4}$
17.  $8\frac{2}{3}$
18.  $6\frac{1}{3}$

Wed. At Your Seat

### Problem Solving

A mixed number is a whole number and a fraction. You can write  $20 \div 9$  as a mixed number. You know that  $20 \div 9 = \frac{20}{9}$ .

Divide the numerator by the denominator.

$$\begin{array}{r} 2 \\ 9 \overline{)20} \\ \underline{18} \\ 2 \end{array}$$

Write the remainder as a fraction. Put the remainder over the divisor.

$$\text{So, } 20 \div 9 = \frac{20}{9} = 2\frac{2}{9}$$

An improper fraction is a fraction whose numerator is greater than or equal to its denominator.

Write  $2\frac{2}{9}$  as an improper fraction.

Multiply the denominator of the fraction by the whole number.  $9 \times 2 = 18$ .

Add the numerator of the fraction.  $18 + 2 = 20$

Write using the same denominator.

$$\text{So, } 2\frac{2}{9} = \frac{20}{9}$$

19. The Long Term Parking sculpture in France contains 60 cars embedded in concrete. It is 65.6 feet high. How tall is the Long Term Parking sculpture as a mixed number and an improper fraction?

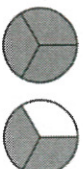
20. Which property tells you that  $7 \times 1 = 7$ ?

21. Reasoning Is  $\frac{5}{2}$  an improper fraction? Explain your reasoning.

22. What is the value of the underlined digit 4 in 423,148,675?

23. The weights in pounds of 4 packages are given below. Order the weights from least to greatest.  
0.9   0.03   1.8   0.14

24. Write an improper fraction and mixed number for the shaded portion of the model.



25. A board is  $4\frac{2}{3}$  feet long. How could you change  $4\frac{2}{3}$  into an improper fraction?

- A Add 4 and  $\frac{2}{3}$ .
- B Divide 4 by  $\frac{2}{3}$ .
- C Multiply 4 by 3. Then, add 2. Write that number as a numerator over a denominator of 3.
- D Multiply 4 by 2 and then add 3. Write as a numerator over a denominator of 3.



Name: \_\_\_\_\_ Date: \_\_\_\_\_



Complete the diamond problems. The top cell contains the *product* of the numbers in the left and right cells, while the bottom cell contains the *sum*.

- |   |   |   |   |
|---|---|---|---|
| (1) $\begin{array}{c} 88 \\ // \quad 8 \\ 19 \end{array}$   | (2) $\begin{array}{c} 66 \\ \quad \quad \\ 17 \end{array}$  | (3) $\begin{array}{c} 36 \\ \quad \quad \\ 15 \end{array}$  | (4) $\begin{array}{c} 18 \\ \quad \quad \\ 11 \end{array}$  |
| (5) $\begin{array}{c} 14 \\ \quad \quad \\ 9 \end{array}$   | (6) $\begin{array}{c} 30 \\ \quad \quad \\ 11 \end{array}$  | (7) $\begin{array}{c} 15 \\ \quad \quad \\ 8 \end{array}$   | (8) $\begin{array}{c} 12 \\ \quad \quad \\ 8 \end{array}$   |
| (9) $\begin{array}{c} 36 \\ \quad \quad \\ 13 \end{array}$  | (10) $\begin{array}{c} 40 \\ \quad \quad \\ 13 \end{array}$ | (11) $\begin{array}{c} 8 \\ \quad \quad \\ 9 \end{array}$   | (12) $\begin{array}{c} 45 \\ \quad \quad \\ 14 \end{array}$ |
| (13) $\begin{array}{c} 90 \\ \quad \quad \\ 19 \end{array}$ | (14) $\begin{array}{c} 33 \\ \quad \quad \\ 14 \end{array}$ | (15) $\begin{array}{c} 24 \\ \quad \quad \\ 11 \end{array}$ | (16) $\begin{array}{c} 72 \\ \quad \quad \\ 17 \end{array}$ |
| (17) $\begin{array}{c} 24 \\ \quad \quad \\ 11 \end{array}$ | (18) $\begin{array}{c} 54 \\ \quad \quad \\ 15 \end{array}$ | (19) $\begin{array}{c} 8 \\ \quad \quad \\ 6 \end{array}$   | (20) $\begin{array}{c} 5 \\ \quad \quad \\ 6 \end{array}$   |
| (21) $\begin{array}{c} 84 \\ \quad \quad \\ 19 \end{array}$ | (22) $\begin{array}{c} 14 \\ \quad \quad \\ 9 \end{array}$  | (23) $\begin{array}{c} 40 \\ \quad \quad \\ 13 \end{array}$ | (24) $\begin{array}{c} 80 \\ \quad \quad \\ 18 \end{array}$ |
| (25) $\begin{array}{c} 11 \\ \quad \quad \\ 12 \end{array}$ | (26) $\begin{array}{c} 66 \\ \quad \quad \\ 17 \end{array}$ | (27) $\begin{array}{c} 20 \\ \quad \quad \\ 9 \end{array}$  | (28) $\begin{array}{c} 63 \\ \quad \quad \\ 16 \end{array}$ |

## Number 11

## Score

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# Topic 9 Reteaching

Set A, pages 220–222

You can find the part of the whole, part of the set, or part of a segment using a model.

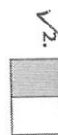
Write the fraction that names the shaded part.



The model shows  $\frac{3}{6}$  shaded.

**Remember** that the numerator tells you how many equal-sized parts are shaded. The denominator tells you the total number of equal-sized parts.

Write fractions for the shaded and unshaded portions of each model.



Set B, pages 224–225

José and three friends want to create chalkboard art in three equal-sized spaces on the playground. How much of each space will each student get?

To show  $3 \div 4$ , you can use a fraction.

$$3 \div 4 = \frac{3}{4}$$

Each student will get  $\frac{3}{4}$  of one space.

Set C, pages 226–227

Write the improper fraction and mixed number.



There are 2 wholes shaded and  $\frac{3}{4}$  of 1 whole shaded. You can see that this is  $2\frac{3}{4}$  or  $\frac{11}{4}$ . You can also follow the steps below to write  $2\frac{3}{4}$  as an improper fraction.

**Step 1**

Multiply the denominator of the fraction by the whole number.

Add the numerator of the fraction to the product of the denominator and the whole number.

**Step 2**

**Step 3**

Write the fraction using the same denominator.

Write each improper fraction as a mixed number.

**Remember** that an improper fraction and a mixed number can represent the same value.

Write each mixed number as an improper fraction.

$$1. 1 \div 4$$

$$2. 2 \div 5$$

**Remember** that to show a fraction on the number line, you need to divide the number line into equal parts.

Give each answer as a fraction. Then show each on a number line.

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

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

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

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

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

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

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

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

$$9. \frac{6}{4}$$

$$10. \frac{12}{9}$$

$$11. \frac{31}{7}$$

$$12. \frac{46}{5}$$

# Topic 9 Reteaching

Set D, pages 228–229

Write two fractions equivalent to  $\frac{3}{7}$ .

To form equivalent fractions, multiply both the numerator and denominator of the given fraction by the same number.

$$\frac{3 \times 4}{7 \times 4} = \frac{12}{28}; \frac{3 \times 5}{7 \times 5} = \frac{15}{35}$$

So,  $\frac{12}{28}$  and  $\frac{15}{35}$  are equivalent to  $\frac{3}{7}$ .

**Remember** that you multiply or divide both the numerator and denominator to find equivalent fractions.

Write two fractions that are equivalent to each of the following.

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

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

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

$$4. \frac{5}{7}$$

Set E, pages 230–231

Compare  $\frac{4}{16}$  and  $\frac{3}{8}$ .

To compare numbers, you can find a common denominator. Write multiples of each number.

Circle the common multiple.

$$16: 16, 32, 48, \dots$$

$$8: 8, 16, 24, \dots$$

Use 16 as the common denominator.

$$\frac{4}{16} = \frac{4}{16}; \frac{3 \times 2}{8 \times 2} = \frac{6}{16}$$

$$\frac{4}{16} < \frac{6}{16} \text{ and so } \frac{4}{16} < \frac{3}{8}$$

Write  $\frac{1}{5}$ ,  $\frac{1}{10}$ , and  $\frac{1}{2}$  in order from least to greatest.

$\frac{1}{8} < \frac{1}{5}$  because both numerators are 1, and  $8 > 5$ .

$\frac{1}{5} < \frac{3}{10}$  because  $\frac{1}{5} = \frac{2}{10}$  and  $\frac{2}{10} < \frac{3}{10}$ .

$\frac{1}{2}$  is greater than any of the values because it is greater than 1.

So, the order is  $\frac{1}{8}, \frac{1}{5}, \frac{1}{10}, \frac{1}{2}$ .

**Remember** that you can always find a common denominator by multiplying the denominators together.

Compare. Write  $>$ ,  $<$ , or  $=$  for each  $\bigcirc$ .

$$1. \frac{2}{3} \bigcirc \frac{3}{10}$$

$$2. \frac{9}{12} \bigcirc \frac{1}{5}$$

$$3. \frac{7}{12} \bigcirc \frac{1}{3}$$

$$4. \frac{8}{15} \bigcirc \frac{20}{45}$$

$$5. \frac{3}{6} \bigcirc \frac{7}{9}$$

$$6. \frac{9}{10} \bigcirc \frac{18}{19}$$

Order the numbers from the least to greatest.

$$7. \frac{2}{3}, \frac{1}{4}, \frac{2}{5}, \frac{1}{3}$$

$$8. \frac{7}{10}, \frac{1}{10}, \frac{1}{3}, \frac{5}{5}$$

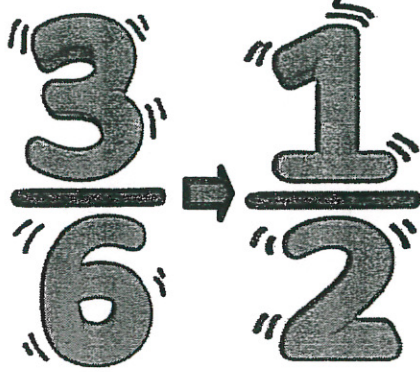
$$9. \frac{9}{10}, \frac{1}{5}, \frac{3}{4}, \frac{11}{12}$$

$$10. \frac{3}{2}, \frac{1}{3}, \frac{3}{5}, \frac{3}{7}$$



Thurs. → Study Facts

# Color by Fraction – Lowest Term



Directions: When a cannot be reduced it is in the lowest terms. Color all of the lowest terms fractions yellow. Color the rest blue.

What was the picture? \_\_\_\_\_

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

Puzzle 1

