## Math Unit 4 Study Guide

Fraction Understanding

## Vocabulary.

Word	Meaning	Example
Equivalent		
Benchmark Fractions		
Proper Fraction		
Improper Fraction		
Whole Number		
Mixed Number		
Line Plot		
Scale		
Data		
X		
Mean/Fair Share		
Ratio		

Proper Fractions. Solve by finding a common denominator. Simplify.

1. 
$$\frac{3}{10} + \frac{1}{4} =$$

$$2. \quad \frac{4}{5} - \frac{4}{15} =$$

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

4. 
$$\frac{5}{12} + \frac{1}{3} =$$

5. 
$$\frac{5}{8} + \frac{5}{6} =$$

6. 
$$\frac{8}{9} - \frac{1}{2} =$$

7. 
$$\frac{3}{5} - \frac{1}{8} =$$

8. 
$$\frac{8}{14} + \frac{2}{7} =$$

Mixed Numbers. Solve by finding a common denominator. Simplify.

1. 
$$2\frac{5}{8} + 2\frac{5}{6} =$$

2. 
$$6\frac{2}{3} - 4\frac{1}{4} =$$

3. 
$$\frac{13}{14}$$
 -  $\frac{3}{7}$  =

4. 
$$7 + \frac{3}{8} =$$

5. 
$$6\frac{1}{10} - 3\frac{3}{5} =$$

6. 
$$q - 3\frac{5}{9} =$$

7. 
$$5\frac{7}{12}$$
 -  $2\frac{2}{6}$  =

8. 
$$\frac{6}{13} + \frac{1}{2} =$$

**Multiple Choice.** Select the correct answer for each problem below.

Which expression can be used to solve  $\frac{5}{6} - \frac{2}{9}$ ?

A. 
$$\frac{5}{15} - \frac{2}{15}$$

A. 
$$\frac{5}{15} - \frac{2}{15}$$
 B.  $\frac{14}{15} - \frac{8}{15}$  C.  $\frac{5}{18} - \frac{2}{18}$  D.  $\frac{15}{18} - \frac{4}{18}$ 

C. 
$$\frac{5}{18} - \frac{2}{18}$$

D. 
$$\frac{15}{18} - \frac{4}{18}$$

Eli read 3/12 of his book today at school. When he got home, he read another 2/3 of his book. What fraction of his book has Eli read so far?





Evelyn used 3 ounces of red paint, 2 3/4 ounces of blue paint, and 7/12 ounces of green paint. How many ounces of paint did Evelyn use altogether?

A. 
$$5\frac{1}{3}$$

B.  $5\frac{5}{12}$  C.  $6\frac{1}{3}$  D.  $6\frac{5}{12}$ 

On Sunday, 5 1/2 inches of snow fell. On Monday, 3 5/6 inches of snow fell. How many more inches of snow fell on Sunday than on Monday?



A.  $|\frac{2}{3}$  B.  $|\frac{2}{6}$  C.  $2\frac{2}{3}$  D.  $2\frac{2}{6}$ 



**Free Response.** Solve each word problem below. Simplify.

Izzy bought 3/4 dozen glazed doughnuts and 2/3 dozen of chocolate sprinkled doughnuts. How many dozen doughnuts did Izzy buy in all?

An ice cream shop sold 6 1/6 gallons of vanilla ice cream and 43/4 gallons of chocolate ice cream. How many gallons of ice cream were sold altogether?





**Comparing Fractions.** Use the >, <, or = symbol to compare the fractions.

$$\frac{3}{5}$$
  $\frac{7}{9}$ 

$$\frac{3}{6}$$
  $\frac{7}{11}$ 

$$\frac{3}{6}$$
  $\frac{7}{11}$   $\frac{1}{5}$   $\frac{5}{12}$ 

**Ordering Fractions.** Order the fractions from least to greatest.

$$\frac{7}{9}$$
,  $\frac{2}{8}$ ,

$$\frac{8}{9}$$
,  $\frac{7}{9}$ ,  $\frac{10}{9}$ 

$$\frac{1}{2}$$
,  $\frac{10}{6}$ ,  $\frac{11}{7}$ 

$$\frac{3}{7}$$
,  $\frac{3}{5}$ ,  $\frac{3}{9}$ 

$$\frac{9}{10}$$
,  $\frac{3}{7}$ ,

$$\frac{1}{2}$$
,  $\frac{9}{5}$ ,  $\frac{6}{9}$ 

**Line Plots.** Create and interpret the line plot using the data below.

Dave went to the post office to mail holiday gifts to his cousins. He weighed each gift package to make sure he added enough stamps to the packages.

Weight of gift packages		
Cousin receiving package	Pounds	
Nicole	<u>3</u> 4	
Mateo	$\frac{1}{4}$	
Heather	<u>2</u> 4	
Brooke	<u>2</u> 4	
Eddie	1	
Colin	<u>2</u> 4	
Perry	<u>2</u> 4	



How many packages weighed less than ¾ pound? \_\_\_\_\_

What is the total weight of all the packages? \_\_\_\_\_ What is the mean weight of all gift packages? \_