

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

## Unit 4 Study Guide

**Equivalent fractions** – multiply the numerator and denominator by the SAME number to make an equivalent fraction.

$$\frac{2}{5} = \frac{\quad}{35}$$

$$\frac{9}{12} = \frac{108}{\quad}$$

$$\frac{13}{\quad} = \frac{65}{105}$$

$$\frac{3}{7} = \frac{93}{\quad}$$

**Adding/ Subtracting “unlike” fractions** – the denominators must be the same. Is there a relationship? If not, find the LCD or multiply them.

$$\frac{2}{7} + \frac{1}{4}$$

$$\frac{3}{5} + \frac{4}{9}$$

$$\frac{6}{7} - \frac{2}{9}$$

$$\frac{10}{11} - \frac{3}{5}$$

**Subtracting Mixed Numbers** – the denominators must be the same. Once you make them the same, determine if you will need to “break” the whole number.

$$5 \frac{2}{5} - 4 \frac{1}{5}$$

$$7 \frac{1}{3} - 3 \frac{3}{7}$$

$$21 \frac{4}{9} - 18 \frac{2}{3}$$

**Modeling Fractions** – drawing fractions.

Model the fraction  $\frac{1}{6}$

Model the fraction  $\frac{2}{3}$

Model the sum of  $\frac{1}{6} + \frac{2}{3}$ :

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**Estimating fractions** – determine where a fraction is on a number line.

$5 \frac{2}{5}$

This mixed number is about...

5       $5 \frac{1}{2}$       6

$2 \frac{1}{9}$

This mixed number is about...

2       $2 \frac{1}{2}$       3

$5 \frac{2}{5} + 2 \frac{1}{9}$

The sum of these mixed numbers is about....

7       $7 \frac{1}{2}$       8

**Making Line Plots of Fractions** – a line plot needs a title, and the fractions must be listed from least to greatest.

Plot the following fractions on the number line.

These are the amount of pizza students ate at the party.

$\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{3}$ ,  $\frac{1}{3}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  
 $\frac{1}{4}$ ,  $\frac{1}{3}$ ,  $\frac{1}{6}$ ,  $\frac{1}{6}$ ,  $\frac{4}{6}$ ,  $\frac{1}{3}$

Are these denominators the same? Yes No

What common denominator could you use? \_\_\_\_\_

Questions using your line plot:

- How many students ate more than  $\frac{1}{2}$  a pizza? \_\_\_\_\_
- What amount of pizza did MOST students eat? \_\_\_\_\_
- How much pizza did ALL the students eat all together? \_\_\_\_\_