

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

ANSWER KEY

Block: \_\_\_\_\_

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

## Fractions - Part 1

## STUDY GUIDE

## Competency 2 - Learning Target #14: I can multiply fractions.

DIRECTIONS: Multiply the fractions. Simplify your answer. SHOW ALL YOUR WORK!

1.)  $\frac{2}{3} \times \frac{1}{6} =$

$$\frac{2}{3} \cdot \frac{1}{6} = \frac{1}{9}$$

2.)  $-\frac{1}{4} \times -\frac{8}{9} =$

$$-\frac{1}{4} \cdot -\frac{8}{9} = \frac{2}{9}$$

3.)  $\frac{1}{12} \times \frac{2}{5} =$

$$\frac{1}{12} \cdot \frac{2}{5} = \frac{1}{30}$$

4.)  $-\frac{1}{5} \times \frac{5}{6} =$

$$-\frac{1}{5} \cdot \frac{5}{6} = -\frac{1}{6}$$

## Competency 2 - Learning Target #15: I can divide fractions.

DIRECTIONS: Divide the fractions. Simplify your answer. SHOW ALL YOUR WORK!

5.)  $\frac{3}{4} \div \frac{6}{8} =$

$$\frac{3}{4} \cdot \frac{8}{6} = \frac{2}{2} = 1$$

6.)  $-\frac{9}{12} \div \frac{3}{5} =$

$$-\frac{9}{12} \cdot \frac{5}{3} = \frac{15}{12} = 1\frac{3}{12} = -\frac{1}{4}$$

## Competency 2 - Learning Target #19: I can multiply mixed numbers.

DIRECTIONS: Multiply the mixed numbers. Simplify your answer. SHOW ALL YOUR WORK!

7.)  $2\frac{4}{5} \times 3\frac{1}{4} =$

9 1/10

8.)  $3\frac{5}{6} \times \frac{3}{12} =$

$$\frac{23}{6} \cdot \frac{3}{12} = \frac{23}{24}$$

9.)  $2 \times 3\frac{3}{4} =$

$$2 \cdot \frac{15}{4} = \frac{15}{2} = 7\frac{1}{2}$$

**Competency 2 - Learning Target #20: I can divide mixed numbers.**

DIRECTIONS: Divide the mixed numbers. Simplify your answer. SHOW ALL YOUR WORK!

10.)  $3\frac{4}{5} \div 5\frac{5}{12} =$

11.)  $2\frac{3}{5} \div \frac{2}{6} =$

$$\frac{19}{5} \div \frac{65}{12} = \frac{19}{5} \cdot \frac{12}{65} = \frac{228}{325}$$

7  $\frac{4}{5}$

**Competency 2 - Learning Target #16: I can convert between improper fractions and mixed numbers.**

DIRECTIONS: Convert the improper fraction to a mixed number or the mixed number to an improper fraction. SHOW ALL YOUR WORK!

12.)  $\frac{13}{4} = 3\frac{1}{4}$

13.)  $\frac{92}{14} = 6\frac{8}{14} = 6\frac{4}{7}$

14.)  $3\frac{3}{4} = \frac{15}{4}$

15.)  $17\frac{3}{8} = \frac{139}{8}$

**Competency 2 - Learning Target #23: I can convert between units of measure**

DIRECTIONS: Convert between systems. Round your answer to the nearest hundredth. SHOW ALL YOUR WORK!

16.) 5.4 miles = \_\_\_\_\_ feet  
1 mile = 5,280 feet

$$\frac{5.4 \text{ mi}}{1} \cdot \frac{5,280 \text{ ft}}{1 \text{ mi}} = 28,512 \text{ ft}$$

17.) 13.7 cups = \_\_\_\_\_ pints  
1 pint = 2 cups

$$\frac{13.7 \text{ C}}{1} \cdot \frac{1 \text{ P}}{2 \text{ C}} = 6.85 \text{ P}$$

18.) 248 ounces = \_\_\_\_\_ pounds  
16 ounces = 1 pound

$$\frac{248 \text{ oz}}{1} \cdot \frac{1 \text{ lb}}{16 \text{ oz}} = 15.5 \text{ lb}$$

19.) 7.8 years = \_\_\_\_\_ weeks  
52 weeks = 1 year

$$\frac{7.8 \text{ y}}{1} \cdot \frac{52 \text{ w}}{1 \text{ y}} = 405.6 \text{ w}$$