

Name \_\_\_\_\_

Instructor \_\_\_\_\_

Date \_\_\_\_\_

**SHOW YOUR WORK!**

The skills needed to complete this worksheet are required for our work in Chapter 6. Please seek help as soon as possible if you have difficulty completing any of these sections.

**Learning Objectives**

- A. Write fractions in simplest form.
- B. Determine whether two fractions are equivalent.
- C. Solve problems by writing fractions in simplest form.
- D. Multiply and divide fractions and decimals.
- E. Solve equations using the multiplication property.

**OBJECTIVE A: Write fractions in simplest form.** (See Section 4.2)

1. Write each fraction in simplest form.

a)  $\frac{24}{27}$

b)  $\frac{-48}{56}$

c)  $-\frac{30}{39}$

d)  $\frac{28}{42}$

**OBJECTIVE B: Determine whether two fractions are equivalent.** (See Section 4.2, page 233)

2. Determine whether each pair of fractions is equivalent.

a)  $\frac{4}{12}$  and  $\frac{6}{18}$

b)  $\frac{14}{21}$  and  $\frac{4}{7}$

**OBJECTIVE C: Solve problems by writing fractions in simplest form.** (See Section 4.2)

Solve each problem. Write the answer in simplest form where necessary.

3. A math class has 45 students. If 18 of the students are males, what fraction of the students are males?
4. There are 60 minutes in an hour. What fraction of an hour does 16 minutes represent?
5. According to a recent study, 9 out of 24 visits to a hospital emergency room were injury-related. What fraction of the visits was injury-related? What fraction of the visits was not injury related?

**OBJECTIVE D: Multiply and divide fractions and decimals.**

6. Multiply or divide.

a)  $-\frac{21}{36} \div \frac{7}{8}$

b)  $\frac{-10.5}{-0.7}$

c)  $\frac{4}{7} \cdot \frac{6x}{12}$

d) Find  $\frac{1}{5}$  of 45.

e)  $(-1.4)(2.3)$

f)  $\frac{0.72}{-2.4}$

**OBJECTIVE E: Solve equations using the multiplication property.**

Solve each equation.

7.  $\frac{x}{0.5} = 1.9$

8.  $\frac{5}{8}m = -\frac{5}{6}$

9.  $-\frac{3}{2}y = \frac{5}{12}$

10.  $2.3a = 8.05$

11.  $-0.96 = -0.8x$

12.  $\frac{-d}{0.6} = 0.24$