

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

## Unit 1 Review (Thus Far)

1. Find the least common multiple by listing multiples.
  - a. 12 and 16
  - b. 4 and 5
  - c. 9 and 24
  - d. 8 and 6
  - e. 10 and 25
  
2. Find the greatest common factor by listing ALL the factors.
  - a. 90 and 56
  - b. 30 and 18
  - c. 24 and 48
  - d. 60 and 24
  - e. 35 and 28
  
3. Use the distributive property to rewrite the problem as the sum of two values.
  - a.  $5(10+9)$
  - b.  $4(6+8)$
  - c.  $2(20-15)$
  - d.  $9(9+7)$
  - e.  $6(7-4)$

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4. Use the distributive property to rewrite the problem as the sum of two values.

a.  $3(6x+9y)$

b.  $4(2a+6b)$

c.  $7(3b-9c)$

d.  $5(6a-9b)$

e.  $8(5h-9g)$

5. Use the distributive property to factor out the greatest common factor

a.

b.  $63+81$

c.  $12+16$

d.  $24+40$

6. Use the distributive property to factor out the greatest common factor

a.  $45x+36$

b.  $60b-50a$

c.  $24c+48k$

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7. Add/Subtract the fractions

EXAMPLE:

To add...

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

Just add up the numerators

$$\frac{1}{5} = \frac{2}{5} = \frac{1+2}{5} = \frac{3}{5}$$

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

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

b.  $\frac{1}{9} + \frac{5}{9}$

d.  $\frac{7}{10} - \frac{1}{10}$

8. Add/Subtract the fractions

EXAMPLE:

$$\frac{1}{6} + \frac{2}{9}$$

$$\begin{array}{r} 3 \cdot \frac{1}{6} + \frac{2}{9} \cdot 2 \\ 3 \cdot \frac{6}{6} + \frac{9}{9} \cdot 2 \end{array}$$

Rewrite with a common denominator.  
Multiples of 6: 6, 12, 18, 24  
Multiples of 9: 9, 18

$$\frac{3}{18} + \frac{4}{18}$$

Add the fractions (add the numerators, the denominator stays the same).

$$\boxed{\frac{7}{18}}$$

a.  $\frac{2}{3} + \frac{5}{7}$

c.  $\frac{7}{10} + \frac{3}{8}$

b.  $\frac{1}{4} + \frac{3}{5}$

d.  $\frac{5}{9} + \frac{2}{3}$

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9. Multiply the fractions

EXAMPLE:

Multiply the numerators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{\underline{\quad}}$$

Multiply the denominators

$$\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$$

a.  $\frac{7}{9} \times \frac{1}{3}$

c.  $\frac{5}{4} \times \frac{1}{2}$

b.  $\frac{2}{5} \times \frac{3}{4}$

d.  $\frac{8}{11} \times \frac{2}{3}$

10. Reduce the fractions

**REDUCING FRACTIONS**

- Summary: Reducing changes the numbers in a fraction, but it does not change the VALUE of a fraction.

To reduce a fraction, you divide both the numerator and denominator by a number that goes into them both evenly.

Example: Reduce  $\frac{14}{16}$

Step 1: Divide both 14 and 16 by a number that goes evenly into both of them.

$$\begin{array}{r} 14 \div 2 \\ 16 \div 2 \\ \hline 7 \end{array}$$

a.  $\frac{10}{20}$

e.  $\frac{16}{18}$

b.  $\frac{16}{24}$

f.  $\frac{14}{42}$

c.  $\frac{75}{100}$

g.  $\frac{25}{70}$

d.  $\frac{12}{60}$

h.  $\frac{36}{40}$