

# Simplest Form

### EXAMPLE

Find GCD (10, 15).

List all of the factors of each number and circle the common factors.

10: ① 2 ⑤ 10

15: ① 3 ⑤ 15

Choose the greatest common factor. GCD (10, 15) = 5

**Directions** Find the greatest common divisor (GCD) of each pair of numbers.

1. (8, 24) \_\_\_\_\_ 3. (14, 16) \_\_\_\_\_ 5. (8, 10) \_\_\_\_\_

2. (5, 10) \_\_\_\_\_ 4. (9, 12) \_\_\_\_\_

**Directions** Express each fraction in simplest form.

6.  $\frac{10}{15}$  \_\_\_\_\_ 12.  $\frac{8}{20}$  \_\_\_\_\_ 18.  $\frac{27}{54}$  \_\_\_\_\_

7.  $\frac{16}{24}$  \_\_\_\_\_ 13.  $\frac{6}{9}$  \_\_\_\_\_ 19.  $\frac{16}{48}$  \_\_\_\_\_

8.  $\frac{78}{90}$  \_\_\_\_\_ 14.  $\frac{18}{20}$  \_\_\_\_\_ 20.  $\frac{81}{108}$  \_\_\_\_\_

9.  $\frac{10}{50}$  \_\_\_\_\_ 15.  $\frac{48}{60}$  \_\_\_\_\_ 21.  $\frac{60}{90}$  \_\_\_\_\_

10.  $\frac{55}{66}$  \_\_\_\_\_ 16.  $\frac{20}{60}$  \_\_\_\_\_ 22.  $\frac{30}{65}$  \_\_\_\_\_

11.  $\frac{12}{15}$  \_\_\_\_\_ 17.  $\frac{63}{108}$  \_\_\_\_\_

**Directions** Solve the problems.

23. Shelly said she has  $\frac{6}{8}$  of all the 1998 NFL collectors' cards. Mark said he has  $\frac{9}{12}$  of them. Do they have the same number of cards? Explain.

24. Ashley said  $\frac{3}{4}$  of her stuffed animals have button eyes. Pam said Ashley has 15 stuffed animals. Is it possible that Pam is correct? Explain.

25. Vince said his survey showed  $\frac{2}{3}$  of his math class liked rap music. There are 24 students in the class. Is it possible that Vince's survey is correct? Explain.

LEARN HOW  
2 = denominator

## 2-4 Adding and Subtracting Fractions

1. Write rational numbers with the same denominator then add and subtract the numerator. Write the sum or difference over the denominator.

WE MUST HAVE SAME DENOMINATOR TO ADD

Examples:

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

$$\textcircled{2} \frac{1}{3} - \frac{1}{3} = \frac{0}{3}$$

LCM = 6

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

$$\frac{3}{6} + \frac{4}{6} = \frac{7}{6}$$

$$\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$$

$$\frac{3}{5} + \frac{4}{5} = \frac{7}{5}$$

$$\frac{2}{3} + \frac{4}{5} = \frac{14}{15}$$

$$\frac{1}{3} + \frac{2}{5} = \frac{7}{15}$$

DEN-SAME WE  
SAME  
+ OR - ONLY  
# OF NUMER.

300 60 12 15  
500 10 15

LCM = LEAST COMMON MULTIPLE OF  
SMALLEST MULTIPLE OF ALL  
GIVEN NUMBERS.

LCM = 12

LCM = 12

LCM = 12

Different Denominators Find  
LCM of Den & Change Fractions +