

# Common Factors and Greatest Common Factor

You can use multiplication facts to find all the factors of a number.

Find the factors of 20.

First find all the multiplication facts for 20.

$1 \times 20 \quad 2 \times 10 \quad 4 \times 5$

List the factors in numerical order.

$1, 2, 4, 5, 10, 20$

Find the factors of 24.

$1 \times 24 \quad 2 \times 12 \quad 3 \times 8 \quad 4 \times 6$

List the factors in numerical order.

$1, 2, 3, 4, 6, 8, 12, 24$

The GCF (greatest common factor) of two numbers is the greatest number that is a factor of both.

Find the GCF of 20 and 24.

Factors of 20: 1, 2, 4, 5, 10, 20

Factors of 24: 1, 2, 3, 4, 6, 8, 12, and 24

The GCF of 20 and 24 is 4.

List all the factors of each number. Circle the common factors. Then identify the GCF.

1. 8: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

32: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

GCF: \_\_\_\_\_

2. 9: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

15: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

GCF: \_\_\_\_\_

3. 6: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

42: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

GCF: \_\_\_\_\_

4. 7: \_\_\_\_\_, \_\_\_\_\_

11: \_\_\_\_\_, \_\_\_\_\_

GCF: \_\_\_\_\_

Find the greatest common factor (GCF) of the numbers.

5. 28 and 40 \_\_\_\_\_

6. 10 and 25 \_\_\_\_\_

7. 18 and 24 \_\_\_\_\_

8. 14 and 21 \_\_\_\_\_

9. 35 and 42 \_\_\_\_\_

10. 15, 25, 30 \_\_\_\_\_