

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

## Greatest Common Factor

When you find all the factors of two or more numbers, and you find some factors are the same ("common"), the largest of those common factors is the **Greatest Common Factor (GCF)**.

What are the factors of 12?                      1, 2, 3, 4, 6, and 12

What are the factors of 20?                    1, 2, 4, 5, 10, and 20

Which are the common factors?            1, 2, and 4

What is the GCF?                                4



### 1. Find the GCF of 8 and 12.

List the factors of 8. \_\_\_\_\_

List the factors of 12. \_\_\_\_\_

List the common factors. \_\_\_\_\_

What is the GCF? \_\_\_\_\_

### 2. Find the GCF of 15 and 20.

List the factors of 15. \_\_\_\_\_

List the factors of 20. \_\_\_\_\_

List the common factors. \_\_\_\_\_

What is the GCF? \_\_\_\_\_

### 3. Find the GCF of 21 and 35.

List the factors of 21. \_\_\_\_\_

List the factors of 35. \_\_\_\_\_

List the common factors. \_\_\_\_\_

What is the GCF? \_\_\_\_\_

### 4. Find the GCF of 6 and 18.

List the factors of 6. \_\_\_\_\_

List the factors of 18. \_\_\_\_\_

List the common factors. \_\_\_\_\_

What is the GCF? \_\_\_\_\_

# ANSWER KEY

## Greatest Common Factor

When you find all the factors of two or more numbers, and you find some factors are the same ("common"), the largest of those common factors is the **Greatest Common Factor (GCF)**.

What are the factors of 12?	1, 2, 3, 4, 6, and 12
What are the factors of 20?	1, 2, 4, 5, 10, and 20
Which are the common factors?	1, 2, and 4
What is the GCF?	4



### 1. Find the GCF of 8 and 12.

List the factors of 8. 1, 2, 4, and 8

List the factors of 12. 1, 2, 3, 4, 6, and 12

List the common factors. 1, 2, and 4

What is the GCF? 4

### 2. Find the GCF of 15 and 20.

List the factors of 15. 1, 3, 5, and 15

List the factors of 20. 1, 2, 4, 5, and 20

List the common factors. 1 and 5

What is the GCF? 5

### 3. Find the GCF of 21 and 35.

List the factors of 21. 1, 3, 7, and 21

List the factors of 35. 1, 5, 7, and 35

List the common factors. 1 and 7

What is the GCF? 7

### 4. Find the GCF of 6 and 18.

List the factors of 6. 1, 2, 3, and 6

List the factors of 18. 1, 2, 3, 6, 9, 18

List the common factors. 1, 2, 3, and 6

What is the GCF? 6