

Name: Class:

Greatest common factor

Find the greatest common factors of the numbers below.

Example : Find the greatest common factor of 72 and 24.

1. Find the prime factors of each number

$$72 = 2 \times 2 \times 2 \times 3 \times 3$$

$$24 = 2 \times 2 \times 2 \times 3$$

2. Find and circle the prime factors that the numbers have in common

$$72 = 2 \times 2 \times 2 \times 3 \times 3$$

$$24 = 2 \times 2 \times 2 \times 3$$

3. **The greatest common factor** of the numbers can be found by multiplying their common prime factors together. $2 \times 2 \times 2 \times 3 = 24$ So, the GCF of 72 and 24 is **24**.

The GCF of 22 and 121 is

The GCF of 91 and 52 is

The GCF of 12 and 96 is

The GCF of 75 and 90 is

The GCF of 28, 54 and 80 is

The GCF of 32, 4 and 20 is

The GCF of 96, 48 and 24 is

The GCF of 98, 7 and 28 is

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The GCF of 22 and 121 is

11

$$22 = 2 \times 11$$

$$121 = 11 \times 11$$

The GCF of 28, 54 and 80 is

2

$$28 = 2 \times 2 \times 7$$

$$54 = 2 \times 3 \times 3 \times 3$$

$$80 = 2 \times 2 \times 2 \times 2 \times 5$$

The GCF of 91 and 52 is

13

$$91 = 7 \times 13$$

$$52 = 2 \times 2 \times 13$$

The GCF of 32, 4 and 20 is

4

$$32 = 2 \times 2 \times 2 \times 2 \times 2$$

$$4 = 2 \times 2$$

$$20 = 2 \times 2 \times 5$$

The GCF of 12 and 96 is

12

$$12 = 2 \times 2 \times 3$$

$$96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$$

The GCF of 96, 48 and 24 is

24

$$48 = 2 \times 2 \times 2 \times 2 \times 3$$

$$96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$$

$$24 = 2 \times 2 \times 2 \times 3$$

The GCF of 75 and 90 is

5

$$75 = 5 \times 5 \times 3$$

$$90 = 2 \times 3 \times 3 \times 5$$

The GCF of 98, 7 and 28 is

7

$$28 = 2 \times 2 \times 7$$

$$98 = 2 \times 7 \times 7$$

$$7 = 7$$