



## Finding Greatest Common Factor

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

**Determine the greatest common factor (GCF) of each set of numbers.**

**Answers**

To find the GCF of 12 & 16, first write down the factors of each number.

Factors of 12    1 , 2 , 3 , 4 , 6 , 12

Factors of 16    1 , 2 , 4 , 8 , 16

2 & 4 are factors both 12 and 16 have in common, with 4 being the greatest. So 4 is the GCF.

1) 2, 30

Factors of 2    \_\_\_\_\_ , \_\_\_\_\_

Factors of 30    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

2) 28, 6

Factors of 28    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 6    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

3) 15, 6

Factors of 15    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 6    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

4) 39, 21

Factors of 39    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 21    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

5) 12, 20

Factors of 12    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 20    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

6) 42, 10

Factors of 42    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 10    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

7) 4, 9

Factors of 4    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 9    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

8) 18, 24

Factors of 18    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 24    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

9) 12, 18

Factors of 12    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

Factors of 18    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



## Finding Greatest Common Factor

Name: **Answer Key**

Determine the greatest common factor (GCF) of each set of numbers.

To find the GCF of 12 & 16, first write down the factors of each number.

Factors of 12    1 , 2 , 3 , 4 , 6 , 12

Factors of 16    1 , 2 , 4 , 8 , 16

2 & 4 are factors both 12 and 16 have in common, with 4 being the greatest. So 4 is the GCF.

### Answers

1) 2, 30

Factors of 2    1 , 2

Factors of 30    1 , 2 , 3 , 5 , 6 , 10 , 15 , 30

1. 2

2) 28, 6

Factors of 28    1 , 2 , 4 , 7 , 14 , 28

Factors of 6    1 , 2 , 3 , 6

2. 2

3) 15, 6

Factors of 15    1 , 3 , 5 , 15

Factors of 6    1 , 2 , 3 , 6

3. 3

4) 39, 21

Factors of 39    1 , 3 , 13 , 39

Factors of 21    1 , 3 , 7 , 21

4. 3

5) 12, 20

Factors of 12    1 , 2 , 3 , 4 , 6 , 12

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

5. 4

6) 42, 10

Factors of 42    1 , 2 , 3 , 6 , 7 , 14 , 21 , 42

Factors of 10    1 , 2 , 5 , 10

6. 2

7) 4, 9

Factors of 4    1 , 2 , 4

Factors of 9    1 , 3 , 9

7. 1

8) 18, 24

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

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

8. 6

9) 12, 18

Factors of 12    1 , 2 , 3 , 4 , 6 , 12

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

9. 6