



## 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) 8 , 24

Factors of 8    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

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

2) 9 , 4

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

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

3) 36 , 6

Factors of 36    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

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

4) 33 , 30

Factors of 33    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

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

5) 4 , 24

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

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

6) 12 , 4

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

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

7) 8 , 33

Factors of 8    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Factors of 33    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

8) 27 , 14

Factors of 27    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Factors of 14    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

9) 18 , 36

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

Factors of 36    \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

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

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

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

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

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

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

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

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

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



## Finding Greatest Common Factor

Name: **Answer Key**

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

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

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

## Answers

1. **8**

2. **1**

3. **6**

4. **3**

5. **4**

6. **4**

7. **1**

8. **1**

9. **18**

1) 8 , 24

Factors of 8    1 , 2 , 4 , 8

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

2) 9 , 4

Factors of 9    1 , 3 , 9

Factors of 4    1 , 2 , 4

3) 36 , 6

Factors of 36    1 , 2 , 3 , 4 , 6 , 9 , 12 , 18 , 36

Factors of 6    1 , 2 , 3 , 6

4) 33 , 30

Factors of 33    1 , 3 , 11 , 33

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

5) 4 , 24

Factors of 4    1 , 2 , 4

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

6) 12 , 4

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

Factors of 4    1 , 2 , 4

7) 8 , 33

Factors of 8    1 , 2 , 4 , 8

Factors of 33    1 , 3 , 11 , 33

8) 27 , 14

Factors of 27    1 , 3 , 9 , 27

Factors of 14    1 , 2 , 7 , 14

9) 18 , 36

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

Factors of 36    1 , 2 , 3 , 4 , 6 , 9 , 12 , 18 , 36