

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

To find the GCF of 12 &amp; 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 &amp; 4 are factors both 12 and 16 have in common, with 4 being the greatest. So 4 is the GCF.

**1)** 27 , 36

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

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

**2)** 42 , 30

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

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

**3)** 21 , 18

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

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

**4)** 39 , 33

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

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

**5)** 33 , 8

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

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

**6)** 42 , 28

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

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

**7)** 27 , 8

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

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

**8)** 9 , 16

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

Factors of 16    \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

**9)** 6 , 36

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

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

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

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

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

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

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

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

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

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

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



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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) 27, 36

Factors of 27    1 , 3 , 9 , 27

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

2) 42, 30

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

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

3) 21, 18

Factors of 21    1 , 3 , 7 , 21

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

4) 39, 33

Factors of 39    1 , 3 , 13 , 39

Factors of 33    1 , 3 , 11 , 33

5) 33, 8

Factors of 33    1 , 3 , 11 , 33

Factors of 8    1 , 2 , 4 , 8

6) 42, 28

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

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

7) 27, 8

Factors of 27    1 , 3 , 9 , 27

Factors of 8    1 , 2 , 4 , 8

8) 9, 16

Factors of 9    1 , 3 , 9

Factors of 16    1 , 2 , 4 , 8 , 16

9) 6, 36

Factors of 6    1 , 2 , 3 , 6

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

1. 9

2. 6

3. 3

4. 3

5. 1

6. 14

7. 1

8. 1

9. 6