Finding Greatest Common Factor

Name: _____

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.

1) 4 , 27

    Factors of 4   ___ , ___ , ___

    Factors of 27   ___ , ___ , ___ , ___

2) 6 , 4

    Factors of 6   ___ , ___ , ___ , ___

    Factors of 4   ___ , ___ , ___

3) 15 , 6

    Factors of 15   ___ , ___ , ___ , ___

    Factors of 6   ___ , ___ , ___ , ___

4) 10 , 28

    Factors of 10   ___ , ___ , ___ , ___

    Factors of 28   ___ , ___ , ___ , ___ , ___ , ___

5) 42 , 21

    Factors of 42   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

    Factors of 21   ___ , ___ , ___ , ___

6) 33 , 10

    Factors of 33   ___ , ___ , ___ , ___

    Factors of 10   ___ , ___ , ___ , ___

7) 18 , 16

    Factors of 18   ___ , ___ , ___ , ___ , ___ , ___

    Factors of 16   ___ , ___ , ___ , ___ , ___

8) 24 , 28

    Factors of 24   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

    Factors of 28   ___ , ___ , ___ , ___ , ___ , ___

9) 6 , 20

    Factors of 6   ___ , ___ , ___ , ___

    Factors of 20   ___ , ___ , ___ , ___ , ___ , ___

1-9 | 89 | 78 | 67 | 56 | 44 | 33 | 22 | 11 | 0

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. **1**

2. **2**

3. **3**

4. **2**

5. **21**

6. **1**

7. **2**

8. **4**

9. **2**

1) 4 , 27

Factors of 4   1 , 2 , 4

Factors of 27   1 , 3 , 9 , 27

2) 6 , 4

Factors of 6   1 , 2 , 3 , 6

Factors of 4   1 , 2 , 4

3) 15 , 6

Factors of 15   1 , 3 , 5 , 15

Factors of 6   1 , 2 , 3 , 6

4) 10 , 28

Factors of 10   1 , 2 , 5 , 10

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

5) 42 , 21

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

Factors of 21   1 , 3 , 7 , 21

6) 33 , 10

Factors of 33   1 , 3 , 11 , 33

Factors of 10   1 , 2 , 5 , 10

7) 18 , 16

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

Factors of 16   1 , 2 , 4 , 8 , 16

8) 24 , 28

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

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

9) 6 , 20

Factors of 6   1 , 2 , 3 , 6

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

Math

1-9 | 89 | 78 | 67 | 56 | 44 | 33 | 22 | 11 | 0