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   <u>1</u> , <u>2</u> , <u>3</u> , <u>4</u> , <u>6</u> , <u>12</u>
>
> Factors of 16   <u>1</u> , <u>2</u> , <u>4</u> , <u>8</u> , <u>16</u>
>
> 2 & 4 are factors both 12 and 16 have in common, with 4 being the greatest. So 4 is the GCF.

1) 26 , 10

    Factors of 26   ____ , ____ , ____ , ____

    Factors of 10   ____ , ____ , ____ , ____

2) 8 , 10

    Factors of 8   ____ , ____ , ____ , ____

    Factors of 10   ____ , ____ , ____ , ____

3) 15 , 9

    Factors of 15   ____ , ____ , ____ , ____

    Factors of 9   ____ , ____ , ____

4) 18 , 4

    Factors of 18   ____ , ____ , ____ , ____ , ____ , ____

    Factors of 4   ____ , ____ , ____

5) 15 , 6

    Factors of 15   ____ , ____ , ____ , ____

    Factors of 6   ____ , ____ , ____ , ____

6) 18 , 42

    Factors of 18   ____ , ____ , ____ , ____ , ____ , ____

    Factors of 42   ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

7) 30 , 45

    Factors of 30   ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

    Factors of 45   ____ , ____ , ____ , ____ , ____ , ____

8) 6 , 45

    Factors of 6   ____ , ____ , ____ , ____

    Factors of 45   ____ , ____ , ____ , ____ , ____ , ____

9) 12 , 4

    Factors of 12   ____ , ____ , ____ , ____ , ____ , ____

    Factors of 4   ____ , ____ , ____

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.   **2**

2.   **2**

3.   **3**

4.   **2**

5.   **3**

6.   **6**

7.   **15**

8.   **3**

9.   **4**

1) 26 , 10

Factors of 26   1 , 2 , 13 , 26

Factors of 10   1 , 2 , 5 , 10

2) 8 , 10

Factors of 8   1 , 2 , 4 , 8

Factors of 10   1 , 2 , 5 , 10

3) 15 , 9

Factors of 15   1 , 3 , 5 , 15

Factors of 9   1 , 3 , 9

4) 18 , 4

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

Factors of 4   1 , 2 , 4

5) 15 , 6

Factors of 15   1 , 3 , 5 , 15

Factors of 6   1 , 2 , 3 , 6

6) 18 , 42

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

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

7) 30 , 45

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

Factors of 45   1 , 3 , 5 , 9 , 15 , 45

8) 6 , 45

Factors of 6   1 , 2 , 3 , 6

Factors of 45   1 , 3 , 5 , 9 , 15 , 45

9) 12 , 4

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

Factors of 4   1 , 2 , 4