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) 26 , 18

Factors of 26   ____ , ____ , ____ , ____

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

2) 24 , 39

Factors of 24   ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

Factors of 39   ____ , ____ , ____ , ____

3) 26 , 30

Factors of 26   ____ , ____ , ____ , ____

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

4) 18 , 9

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

Factors of 9   ____ , ____ , ____

5) 6 , 4

Factors of 6   ____ , ____ , ____ , ____

Factors of 4   ____ , ____ , ____

6) 12 , 39

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

Factors of 39   ____ , ____ , ____ , ____

7) 30 , 42

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

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

8) 42 , 18

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

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

9) 27 , 6

Factors of 27   ____ , ____ , ____ , ____

Factors of 6   ____ , ____ , ____ , ____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

Math

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

Name: **Answer Key**

Answers

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**

1) 26 , 18
Factors of 26   1 , 2 , 13 , 26
Factors of 18   1 , 2 , 3 , 6 , 9 , 18

2.   **3**

2) 24 , 39
Factors of 24   1 , 2 , 3 , 4 , 6 , 8 , 12 , 24
Factors of 39   1 , 3 , 13 , 39

3.   **2**

3) 26 , 30
Factors of 26   1 , 2 , 13 , 26
Factors of 30   1 , 2 , 3 , 5 , 6 , 10 , 15 , 30

4.   **9**

4) 18 , 9
Factors of 18   1 , 2 , 3 , 6 , 9 , 18
Factors of 9   1 , 3 , 9

5.   **2**

5) 6 , 4
Factors of 6   1 , 2 , 3 , 6
Factors of 4   1 , 2 , 4

6.   **3**

6) 12 , 39
Factors of 12   1 , 2 , 3 , 4 , 6 , 12
Factors of 39   1 , 3 , 13 , 39

7.   **6**

7) 30 , 42
Factors of 30   1 , 2 , 3 , 5 , 6 , 10 , 15 , 30
Factors of 42   1 , 2 , 3 , 6 , 7 , 14 , 21 , 42

8.   **6**

8) 42 , 18
Factors of 42   1 , 2 , 3 , 6 , 7 , 14 , 21 , 42
Factors of 18   1 , 2 , 3 , 6 , 9 , 18

9.   **3**

9) 27 , 6
Factors of 27   1 , 3 , 9 , 27
Factors of 6   1 , 2 , 3 , 6

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

Math