

Find the greatest common factor of the given numbers.

greatest common factor	
1.	38 and 4
2.	6 and 34
3.	36 and 10
4.	33 and 18
5.	15 and 30
6.	36 and 15
7.	30 and 36
8.	14 and 12
9.	6 and 10
10.	24 and 18
11.	30 and 27
12.	26 and 10

Find the greatest common factor of the given numbers.

1. 38 and 4

2

2. 6 and 34

2

3. 36 and 10

2

4. 33 and 18

3

5. 15 and 30

15

6. 36 and 15

3

7. 30 and 36

6

8. 14 and 12

2

9. 6 and 10

2

10. 24 and 18

6

11. 30 and 27

3

12. 26 and 10

2

greatest common factor

Solution Steps

¹⁾ **38 and 4**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 38 are: **1, 2, 19, 38**

Divisors of 4 are: **1, 2, 4**

The largest number that divides **38 and 4** is **2**, so the $GCF = 2$

²⁾ **6 and 34**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 6 are: **1, 2, 3, 6**

Divisors of 34 are: **1, 2, 17, 34**

The largest number that divides **6 and 34** is **2**, so the $GCF = 2$

³⁾ **36 and 10**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 36 are: **1, 2, 3, 4, 6, 9, 12, 18, 36**

Divisors of 10 are: **1, 2, 5, 10**

The largest number that divides **36 and 10** is **2**, so the $GCF = 2$

⁴⁾ **33 and 18**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 33 are: **1, 3, 11, 33**

Divisors of 18 are: **1, 2, 3, 6, 9, 18**

The largest number that divides **33 and 18** is **3**, so the $GCF = 3$

⁵⁾ **15 and 30**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 15 are: **1, 3, 5, 15**

Divisors of 30 are: **1, 2, 3, 5, 6, 10, 15, 30**

The largest number that divides 15 and 30 is 15, so the GCF = 15

⁶⁾ **36 and 15**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 36 are: **1, 2, 3, 4, 6, 9, 12, 18, 36**

Divisors of 15 are: **1, 3, 5, 15**

The largest number that divides 36 and 15 is 3, so the GCF = 3

⁷⁾ **30 and 36**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 30 are: **1, 2, 3, 5, 6, 10, 15, 30**

Divisors of 36 are: **1, 2, 3, 4, 6, 9, 12, 18, 36**

The largest number that divides 30 and 36 is 6, so the GCF = 6

⁸⁾ **14 and 12**

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 14 are: **1, 2, 7, 14**

Divisors of 12 are: **1, 2, 3, 4, 6, 12**

The largest number that divides 14 and 12 is 2, so the GCF = 2

⁹⁾ 6 and 10

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 6 are: **1, 2, 3, 6**

Divisors of 10 are: **1, 2, 5, 10**

The largest number that divides 6 and 10 is **2**, so the GCF = 2

¹⁰⁾ 24 and 18

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 24 are: **1, 2, 3, 4, 6, 8, 12, 24**

Divisors of 18 are: **1, 2, 3, 6, 9, 18**

The largest number that divides 24 and 18 is **6**, so the GCF = 6

¹¹⁾ 30 and 27

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 30 are: **1, 2, 3, 5, 6, 10, 15, 30**

Divisors of 27 are: **1, 3, 9, 27**

The largest number that divides 30 and 27 is **3**, so the GCF = 3

¹²⁾ 26 and 10

First list the factors of the number (the numbers that divide each number with zero remainder)

Divisors of 26 are: **1, 2, 13, 26**

Divisors of 10 are: **1, 2, 5, 10**

The largest number that divides 26 and 10 is **2**, so the GCF = 2