



**Find the greatest common factor of the given numbers.**

1. 28 and 38

2

2. 38 and 30

2

3. 21 and 9

3

4. 10 and 30

10

5. 15 and 6

3

6. 30 and 24

6

7. 4 and 22

2

8. 28 and 34

2

9. 6 and 16

2

10. 15 and 25

5

11. 18 and 34

2

12. 14 and 34

2

**greatest common factor**

**Solution Steps**

<sup>1)</sup> 28 and 38

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

Divisors of 28 are: **1, 2, 4, 7, 14, 28**

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

The largest number that divides 28 and 38 is 2, so the GCF = 2

<sup>2)</sup> 38 and 30

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

The largest number that divides 38 and 30 is 2, so the GCF = 2

<sup>3)</sup> 21 and 9

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

Divisors of 21 are: **1, 3, 7, 21**

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

The largest number that divides 21 and 9 is 3, so the GCF = 3

<sup>4)</sup> 10 and 30

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

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

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

The largest number that divides 10 and 30 is 10, so the GCF = 10

<sup>5)</sup> 15 and 6

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

The largest number that divides 15 and 6 is **3**, so the GCF = **3**

<sup>6)</sup> 30 and 24

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

The largest number that divides 30 and 24 is **6**, so the GCF = **6**

<sup>7)</sup> 4 and 22

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

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

Divisors of 22 are: **1, 2, 11, 22**

The largest number that divides 4 and 22 is **2**, so the GCF = **2**

<sup>8)</sup> 28 and 34

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

Divisors of 28 are: **1, 2, 4, 7, 14, 28**

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

The largest number that divides 28 and 34 is **2**, so the GCF = **2**

<sup>9)</sup> 6 and 16

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 16 are: **1, 2, 4, 8, 16**

The largest number that divides 6 and 16 is **2**, so the GCF = 2

<sup>10)</sup> 15 and 25

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 25 are: **1, 5, 25**

The largest number that divides 15 and 25 is **5**, so the GCF = 5

<sup>11)</sup> 18 and 34

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

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

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

The largest number that divides 18 and 34 is **2**, so the GCF = 2

<sup>12)</sup> 14 and 34

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

The largest number that divides 14 and 34 is **2**, so the GCF = 2