

Find the greatest common factor of the given numbers.

1. 14 and 16

2

2. 28 and 35

7

3. 12 and 22

2

4. 32 and 8

8

5. 20 and 5

5

6. 18 and 28

2

7. 12 and 10

2

8. 8 and 26

2

9. 16 and 32

16

10. 25 and 10

5

11. 21 and 33

3

12. 14 and 24

2

greatest common factor

Solution Steps

¹⁾ 14 and 16

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

The largest number that divides 14 and 16 is 2, so the GCF = 2

²⁾ 28 and 35

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 35 are: **1, 5, 7, 35**

The largest number that divides 28 and 35 is 7, so the GCF = 7

³⁾ 12 and 22

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

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

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

The largest number that divides 12 and 22 is 2, so the GCF = 2

⁴⁾ 32 and 8

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

Divisors of 32 are: **1, 2, 4, 8, 16, 32**

Divisors of 8 are: **1, 2, 4, 8**

The largest number that divides 32 and 8 is 8, so the GCF = 8

⁵⁾ 20 and 5

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

Divisors of 20 are: **1, 2, 4, 5, 10, 20**

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

The largest number that divides 20 and 5 is 5, so the GCF = 5

⁶⁾ 18 and 28

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

The largest number that divides 18 and 28 is 2, so the GCF = 2

⁷⁾ 12 and 10

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

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

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

The largest number that divides 12 and 10 is 2, so the GCF = 2

⁸⁾ 8 and 26

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

Divisors of 8 are: **1, 2, 4, 8**

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

The largest number that divides 8 and 26 is 2, so the GCF = 2

⁹⁾ 16 and 32

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

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

Divisors of 32 are: **1, 2, 4, 8, 16, 32**

The largest number that divides 16 and 32 is 16, so the GCF = 16

¹⁰⁾ 25 and 10

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

Divisors of 25 are: **1, 5, 25**

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

The largest number that divides 25 and 10 is 5, so the GCF = 5

¹¹⁾ 21 and 33

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

The largest number that divides 21 and 33 is 3, so the GCF = 3

¹²⁾ 14 and 24

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

The largest number that divides 14 and 24 is 2, so the GCF = 2