Finding Greatest Common Factor

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) 27 , 45

Factors of 27   ____ , ____ , ____ , ____

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

2) 30 , 21

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

Factors of 21   ____ , ____ , ____ , ____

3) 4 , 10

Factors of 4   ____ , ____ , ____

Factors of 10   ____ , ____ , ____ , ____

4) 8 , 45

Factors of 8   ____ , ____ , ____ , ____

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

5) 27 , 36

Factors of 27   ____ , ____ , ____ , ____

Factors of 36   ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

6) 24 , 12

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

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

7) 24 , 6

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

Factors of 6   ____ , ____ , ____ , ____

8) 26 , 22

Factors of 26   ____ , ____ , ____ , ____

Factors of 22   ____ , ____ , ____ , ____

9) 26 , 16

Factors of 26   ____ , ____ , ____ , ____

Factors of 16   ____ , ____ , ____ , ____ , ____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

Name: **Answer Key**

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. **9**

2. **3**

3. **2**

4. **1**

5. **9**

6. **12**

7. **6**

8. **2**

9. **2**

1) 27 , 45

Factors of 27   1 , 3 , 9 , 27

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

2) 30 , 21

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

Factors of 21   1 , 3 , 7 , 21

3) 4 , 10

Factors of 4   1 , 2 , 4

Factors of 10   1 , 2 , 5 , 10

4) 8 , 45

Factors of 8   1 , 2 , 4 , 8

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

5) 27 , 36

Factors of 27   1 , 3 , 9 , 27

Factors of 36   1 , 2 , 3 , 4 , 6 , 9 , 12 , 18 , 36

6) 24 , 12

Factors of 24   1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

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

7) 24 , 6

Factors of 24   1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

Factors of 6   1 , 2 , 3 , 6

8) 26 , 22

Factors of 26   1 , 2 , 13 , 26

Factors of 22   1 , 2 , 11 , 22

9) 26 , 16

Factors of 26   1 , 2 , 13 , 26

Factors of 16   1 , 2 , 4 , 8 , 16

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