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. _____

2. _____

3. _____

1) 24 , 6

Factors of 24   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 6   ___ , ___ , ___ , ___

4. _____

2) 24 , 4

Factors of 24   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 4   ___ , ___ , ___

5. _____

6. _____

3) 22 , 14

Factors of 22   ___ , ___ , ___ , ___

Factors of 14   ___ , ___ , ___ , ___

7. _____

4) 42 , 20

Factors of 42   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 20   ___ , ___ , ___ , ___ , ___ , ___

8. _____

9. _____

5) 28 , 12

Factors of 28   ___ , ___ , ___ , ___ , ___ , ___

Factors of 12   ___ , ___ , ___ , ___ , ___ , ___

6) 36 , 28

Factors of 36   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 28   ___ , ___ , ___ , ___ , ___ , ___

7) 36 , 22

Factors of 36   ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 22   ___ , ___ , ___ , ___

8) 12 , 9

Factors of 12   ___ , ___ , ___ , ___ , ___ , ___

Factors of 9   ___ , ___ , ___

9) 26 , 16

Factors of 26   ___ , ___ , ___ , ___

Factors of 16   ___ , ___ , ___ , ___ , ___

Name: **Answer Key**

Determine the greatest common factor (GCF) of each set of numbers.

Answers

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. **6**

2. **4**

3. **2**

4. **2**

5. **4**

6. **4**

7. **2**

8. **3**

9. **2**

1) 24 , 6

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

Factors of 6   1 , 2 , 3 , 6

2) 24 , 4

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

Factors of 4   1 , 2 , 4

3) 22 , 14

Factors of 22   1 , 2 , 11 , 22

Factors of 14   1 , 2 , 7 , 14

4) 42 , 20

Factors of 42   1 , 2 , 3 , 6 , 7 , 14 , 21 , 42

Factors of 20   1 , 2 , 4 , 5 , 10 , 20

5) 28 , 12

Factors of 28   1 , 2 , 4 , 7 , 14 , 28

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

6) 36 , 28

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

Factors of 28   1 , 2 , 4 , 7 , 14 , 28

7) 36 , 22

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

Factors of 22   1 , 2 , 11 , 22

8) 12 , 9

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

Factors of 9   1 , 3 , 9

9) 26 , 16

Factors of 26   1 , 2 , 13 , 26

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

Math

8

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