# 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)**  33 , 24

Factors of 33     ____ , ____ , ____ , ____

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

**2)**  6 , 33

Factors of 6     ____ , ____ , ____ , ____

Factors of 33     ____ , ____ , ____ , ____

**3)**  33 , 8

Factors of 33     ____ , ____ , ____ , ____

Factors of 8     ____ , ____ , ____ , ____

**4)**  16 , 12

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

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

**5)**  24 , 14

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

Factors of 14     ____ , ____ , ____ , ____

**6)**  28 , 22

Factors of 28     ____ , ____ , ____ , ____ , ____ , ____

Factors of 22     ____ , ____ , ____ , ____

**7)**  12 , 6

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

Factors of 6     ____ , ____ , ____ , ____

**8)**  30 , 12

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

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

**9)**  21 , 39

Factors of 21     ____ , ____ , ____ , ____

Factors of 39     ____ , ____ , ____ , ____

**Math**

1

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

Name:

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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. **3**

2. **3**

3. **1**

4. **4**

5. **2**

6. **2**

7. **6**

8. **6**

9. **3**

**1)** 33 , 24

Factors of 33     1 , 3 , 11 , 33

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

**2)** 6 , 33

Factors of 6     1 , 2 , 3 , 6

Factors of 33     1 , 3 , 11 , 33

**3)** 33 , 8

Factors of 33     1 , 3 , 11 , 33

Factors of 8     1 , 2 , 4 , 8

**4)** 16 , 12

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

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

**5)** 24 , 14

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

Factors of 14     1 , 2 , 7 , 14

**6)** 28 , 22

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

Factors of 22     1 , 2 , 11 , 22

**7)** 12 , 6

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

Factors of 6     1 , 2 , 3 , 6

**8)** 30 , 12

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

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

**9)** 21 , 39

Factors of 21     1 , 3 , 7 , 21

Factors of 39     1 , 3 , 13 , 39

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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. _____

**1)** 45 , 12

Factors of 45    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 12    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

2. _____

3. _____

4. _____

**2)** 18 , 21

Factors of 18    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 21    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

5. _____

6. _____

**3)** 14 , 39

Factors of 14    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 39    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

7. _____

8. _____

**4)** 15 , 18

Factors of 15    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 18    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

9. _____

**5)** 3 , 12

Factors of 3    \_\_\_ , \_\_\_

Factors of 12    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

**6)** 12 , 28

Factors of 12    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 28    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

**7)** 3 , 22

Factors of 3    \_\_\_ , \_\_\_

Factors of 22    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

**8)** 12 , 30

Factors of 12    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 30    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

**9)** 18 , 20

Factors of 18    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

Factors of 20    \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_ , \_\_\_

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

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. __**3**__

2. __**3**__

3. __**1**__

4. __**3**__

5. __**3**__

6. __**4**__

7. __**1**__

8. __**6**__

9. __**2**__

**1)** 45 , 12

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

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

**2)** 18 , 21

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

Factors of 21    1 , 3 , 7 , 21

**3)** 14 , 39

Factors of 14    1 , 2 , 7 , 14

Factors of 39    1 , 3 , 13 , 39

**4)** 15 , 18

Factors of 15    1 , 3 , 5 , 15

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

**5)** 3 , 12

Factors of 3    1 , 3

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

**6)** 12 , 28

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

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

**7)** 3 , 22

Factors of 3    1 , 3

Factors of 22    1 , 2 , 11 , 22

**8)** 12 , 30

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

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

**9)** 18 , 20

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

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

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

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. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

**1)** 16 , 12

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

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

**2)** 16 , 33

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

Factors of 33    ___ , ___ , ___ , ___

**3)** 36 , 16

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

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

**4)** 6 , 24

Factors of 6    ___ , ___ , ___ , ___

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

**5)** 12 , 6

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

Factors of 6    ___ , ___ , ___ , ___

**6)** 10 , 22

Factors of 10    ___ , ___ , ___ , ___

Factors of 22    ___ , ___ , ___ , ___

**7)** 28 , 36

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

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

**8)** 30 , 22

Factors of 30    ___ , ___ , ___ , ___ , ___ , ___ , ___ , ___

Factors of 22    ___ , ___ , ___ , ___

**9)** 33 , 42

Factors of 33    ___ , ___ , ___ , ___

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

**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. ___**4**___

2. ___**1**___

3. ___**4**___

4. ___**6**___

5. ___**6**___

6. ___**2**___

7. ___**4**___

8. ___**2**___

9. ___**3**___

**1)**  16 , 12

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

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

**2)**  16 , 33

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

Factors of 33     1 , 3 , 11 , 33

**3)**  36 , 16

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

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

**4)**  6 , 24

Factors of 6     1 , 2 , 3 , 6

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

**5)**  12 , 6

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

Factors of 6     1 , 2 , 3 , 6

**6)**  10 , 22

Factors of 10     1 , 2 , 5 , 10

Factors of 22     1 , 2 , 11 , 22

**7)**  28 , 36

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

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

**8)**  30 , 22

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

Factors of 22     1 , 2 , 11 , 22

**9)**  33 , 42

Factors of 33     1 , 3 , 11 , 33

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

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

# Finding Greatest Common Factor

Name:

**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. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

**1)** 6 , 21

Factors of 6 ___ , ___ , ___ , ___

Factors of 21 ___ , ___ , ___ , ___

**2)** 27 , 28

Factors of 27 ___ , ___ , ___ , ___

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

**3)** 14 , 24

Factors of 14 ___ , ___ , ___ , ___

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

**4)** 24 , 45

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

Factors of 45 ___ , ___ , ___ , ___ , ___ , ___

**5)** 2 , 24

Factors of 2 ___ , ___

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

**6)** 14 , 18

Factors of 14 ___ , ___ , ___ , ___

Factors of 18 ___ , ___ , ___ , ___ , ___ , ___

**7)** 12 , 24

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

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

**8)** 2 , 45

Factors of 2 ___ , ___

Factors of 45 ___ , ___ , ___ , ___ , ___ , ___

**9)** 21 , 16

Factors of 21 ___ , ___ , ___ , ___

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

**Math** www.CommonCoreSheets.com  4

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

**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. **3**
2. **1**
3. **2**
4. **3**
5. **2**
6. **2**
7. **12**
8. **1**
9. **1**

**1)** 6 , 21
Factors of 6     1 , 2 , 3 , 6
Factors of 21    1 , 3 , 7 , 21

**2)** 27 , 28
Factors of 27    1 , 3 , 9 , 27
Factors of 28    1 , 2 , 4 , 7 , 14 , 28

**3)** 14 , 24
Factors of 14    1 , 2 , 7 , 14
Factors of 24    1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

**4)** 24 , 45
Factors of 24    1 , 2 , 3 , 4 , 6 , 8 , 12 , 24
Factors of 45    1 , 3 , 5 , 9 , 15 , 45

**5)** 2 , 24
Factors of 2     1 , 2
Factors of 24    1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

**6)** 14 , 18
Factors of 14    1 , 2 , 7 , 14
Factors of 18    1 , 2 , 3 , 6 , 9 , 18

**7)** 12 , 24
Factors of 12    1 , 2 , 3 , 4 , 6 , 12
Factors of 24    1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

**8)** 2 , 45
Factors of 2     1 , 2
Factors of 45    1 , 3 , 5 , 9 , 15 , 45

**9)** 21 , 16
Factors of 21    1 , 3 , 7 , 21
Factors of 16    1 , 2 , 4 , 8 , 16

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. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

**1)** 6 , 9

Factors of 6     ____ , ____ , ____ , ____

Factors of 9     ____ , ____ , ____

**2)** 45 , 33

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

Factors of 33     ____ , ____ , ____ , ____

**3)** 45 , 20

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

Factors of 20     ____ , ____ , ____ , ____ , ____ , ____

**4)** 20 , 33

Factors of 20     ____ , ____ , ____ , ____ , ____ , ____

Factors of 33     ____ , ____ , ____ , ____

**5)** 4 , 26

Factors of 4     ____ , ____ , ____

Factors of 26     ____ , ____ , ____ , ____

**6)** 28 , 15

Factors of 28     ____ , ____ , ____ , ____ , ____ , ____

Factors of 15     ____ , ____ , ____ , ____

**7)** 10 , 12

Factors of 10     ____ , ____ , ____ , ____

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

**8)** 30 , 36

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

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

**9)** 39 , 22

Factors of 39     ____ , ____ , ____ , ____

Factors of 22     ____ , ____ , ____ , ____

Name:

**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. _____ **3**

2. _____ **3**

3. _____ **5**

4. _____ **1**

5. _____ **2**

6. _____ **1**

7. _____ **2**

8. _____ **6**

9. _____ **1**

**1)** 6 , 9

Factors of 6      1 , 2 , 3 , 6

Factors of 9      1 , 3 , 9

**2)** 45 , 33

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

Factors of 33      1 , 3 , 11 , 33

**3)** 45 , 20

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

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

**4)** 20 , 33

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

Factors of 33      1 , 3 , 11 , 33

**5)** 4 , 26

Factors of 4      1 , 2 , 4

Factors of 26      1 , 2 , 13 , 26

**6)** 28 , 15

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

Factors of 15      1 , 3 , 5 , 15

**7)** 10 , 12

Factors of 10      1 , 2 , 5 , 10

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

**8)** 30 , 36

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

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

**9)** 39 , 22

Factors of 39      1 , 3 , 13 , 39

Factors of 22      1 , 2 , 11 , 22

**Math**

5

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

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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. _____

**1)** 24 , 2

Factors of 24     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 2     \_\_\_\_ , \_\_\_\_

2. _____

**2)** 30 , 22

Factors of 30     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 22     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

3. _____

**3)** 26 , 21

Factors of 26     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 21     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

4. _____

**4)** 18 , 24

Factors of 18     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 24     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

5. _____

**5)** 27 , 6

Factors of 27     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 6     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

6. _____

**6)** 6 , 24

Factors of 6     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 24     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

7. _____

**7)** 18 , 9

Factors of 18     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 9     \_\_\_\_ , \_\_\_\_ , \_\_\_\_

8. _____

**8)** 45 , 42

Factors of 45     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 42     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

9. _____

**9)** 15 , 3

Factors of 15     \_\_\_\_ , \_\_\_\_ , \_\_\_\_ , \_\_\_\_

Factors of 3     \_\_\_\_ , \_\_\_\_

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

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)**  24 , 2

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

Factors of 2    1 , 2

**2)**  30 , 22

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

Factors of 22    1 , 2 , 11 , 22

**3)**  26 , 21

Factors of 26    1 , 2 , 13 , 26

Factors of 21    1 , 3 , 7 , 21

**4)**  18 , 24

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

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

**5)**  27 , 6

Factors of 27    1 , 3 , 9 , 27

Factors of 6    1 , 2 , 3 , 6

**6)**  6 , 24

Factors of 6    1 , 2 , 3 , 6

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

**7)**  18 , 9

Factors of 18    1 , 2 , 3 , 6 , 9 , 18

Factors of 9    1 , 3 , 9

**8)**  45 , 42

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

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

**9)**  15 , 3

Factors of 15    1 , 3 , 5 , 15

Factors of 3    1 , 3

| # | Answer |
|---|--------|
| 1. | **2** |
| 2. | **2** |
| 3. | **1** |
| 4. | **6** |
| 5. | **3** |
| 6. | **6** |
| 7. | **9** |
| 8. | **3** |
| 9. | **3** |

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

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)**  8 , 6

Factors of 8     ____ , ____ , ____ , ____

Factors of 6     ____ , ____ , ____ , ____

4. _____

**2)**  28 , 10

Factors of 28    ____ , ____ , ____ , ____ , ____ , ____

Factors of 10    ____ , ____ , ____ , ____

5. _____

6. _____

**3)**  12 , 22

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

Factors of 22    ____ , ____ , ____ , ____

7. _____

8. _____

**4)**  24 , 18

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

Factors of 18    ____ , ____ , ____ , ____ , ____ , ____

9. _____

**5)**  2 , 15

Factors of 2     ____ , ____

Factors of 15    ____ , ____ , ____ , ____

**6)**  15 , 12

Factors of 15    ____ , ____ , ____ , ____

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

**7)**  22 , 24

Factors of 22    ____ , ____ , ____ , ____

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

**8)**  20 , 42

Factors of 20    ____ , ____ , ____ , ____ , ____ , ____

Factors of 42    ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

**9)**  6 , 22

Factors of 6     ____ , ____ , ____ , ____

Factors of 22    ____ , ____ , ____ , ____

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

**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. _____ **2**

2. _____ **2**

3. _____ **2**

4. _____ **6**

5. _____ **1**

6. _____ **3**

7. _____ **2**

8. _____ **2**

9. _____ **2**

**1)**  8 , 6

Factors of 8       1 , 2 , 4 , 8

Factors of 6       1 , 2 , 3 , 6

**2)**  28 , 10

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

Factors of 10       1 , 2 , 5 , 10

**3)**  12 , 22

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

Factors of 22       1 , 2 , 11 , 22

**4)**  24 , 18

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

Factors of 18       1 , 2 , 3 , 6 , 9 , 18

**5)**  2 , 15

Factors of 2       1 , 2

Factors of 15       1 , 3 , 5 , 15

**6)**  15 , 12

Factors of 15       1 , 3 , 5 , 15

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

**7)**  22 , 24

Factors of 22       1 , 2 , 11 , 22

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

**8)**  20 , 42

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

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

**9)**  6 , 22

Factors of 6       1 , 2 , 3 , 6

Factors of 22       1 , 2 , 11 , 22

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

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. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

**1)** 24 , 6

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

Factors of 6     ____ , ____ , ____ , ____

**2)** 24 , 4

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

Factors of 4     ____ , ____ , ____

**3)** 15 , 26

Factors of 15     ____ , ____ , ____ , ____

Factors of 26     ____ , ____ , ____ , ____

**4)** 42 , 20

Factors of 42     ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

Factors of 20     ____ , ____ , ____ , ____ , ____ , ____

**5)** 9 , 26

Factors of 9     ____ , ____ , ____

Factors of 26     ____ , ____ , ____ , ____

**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     ____ , ____ , ____ , ____ , ____

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

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. ____**6**____

2. ____**4**____

3. ____**1**____

4. ____**2**____

5. ____**1**____

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)**  15 , 26

Factors of 15    1 , 3 , 5 , 15

Factors of 26    1 , 2 , 13 , 26

**4)**  42 , 20

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

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

**5)**  9 , 26

Factors of 9    1 , 3 , 9

Factors of 26    1 , 2 , 13 , 26

**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

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

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)** 12 , 24

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

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

4. _____

5. _____

**2)** 33 , 45

Factors of 33   ____ , ____ , ____ , ____

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

6. _____

**3)** 24 , 20

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

Factors of 20   ____ , ____ , ____ , ____ , ____ , ____

7. _____

**4)** 8 , 45

Factors of 8   ____ , ____ , ____ , ____

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

8. _____

**5)** 33 , 2

Factors of 33   ____ , ____ , ____ , ____

Factors of 2   ____ , ____

9. _____

**6)** 26 , 24

Factors of 26   ____ , ____ , ____ , ____

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

**7)** 24 , 8

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

Factors of 8   ____ , ____ , ____ , ____

**8)** 14 , 2

Factors of 14   ____ , ____ , ____ , ____

Factors of 2   ____ , ____

**9)** 42 , 30

Factors of 42   ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

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

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

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. _____ **12**

2. _____ **3**

3. _____ **4**

4. _____ **1**

5. _____ **1**

6. _____ **2**

7. _____ **8**

8. _____ **2**

9. _____ **6**

**1)** 12 , 24

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

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

**2)** 33 , 45

Factors of 33   1 , 3 , 11 , 33

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

**3)** 24 , 20

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

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

**4)** 8 , 45

Factors of 8   1 , 2 , 4 , 8

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

**5)** 33 , 2

Factors of 33   1 , 3 , 11 , 33

Factors of 2   1 , 2

**6)** 26 , 24

Factors of 26   1 , 2 , 13 , 26

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

**7)** 24 , 8

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

Factors of 8   1 , 2 , 4 , 8

**8)** 14 , 2

Factors of 14   1 , 2 , 7 , 14

Factors of 2   1 , 2

**9)** 42 , 30

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

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

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

**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 , 36

Factors of 27      ____ , ____ , ____ , ____

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

**2)**  42 , 30

Factors of 42      ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

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

**3)**  21 , 18

Factors of 21      ____ , ____ , ____ , ____

Factors of 18      ____ , ____ , ____ , ____ , ____ , ____

**4)**  39 , 33

Factors of 39      ____ , ____ , ____ , ____

Factors of 33      ____ , ____ , ____ , ____

**5)**  33 , 8

Factors of 33      ____ , ____ , ____ , ____

Factors of 8      ____ , ____ , ____ , ____

**6)**  42 , 28

Factors of 42      ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

Factors of 28      ____ , ____ , ____ , ____ , ____ , ____

**7)**  27 , 8

Factors of 27      ____ , ____ , ____ , ____

Factors of 8      ____ , ____ , ____ , ____

**8)**  9 , 16

Factors of 9      ____ , ____ , ____

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

**9)**  6 , 36

Factors of 6      ____ , ____ , ____ , ____

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

**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. __**6**__

3. __**3**__

4. __**3**__

5. __**1**__

6. __**14**__

7. __**1**__

8. __**1**__

9. __**6**__

**1)** 27 , 36

Factors of 27   __1 , 3 , 9 , 27__

Factors of 36   __1 , 2 , 3 , 4 , 6 , 9 , 12 , 18 , 36__

**2)** 42 , 30

Factors of 42   __1 , 2 , 3 , 6 , 7 , 14 , 21 , 42__

Factors of 30   __1 , 2 , 3 , 5 , 6 , 10 , 15 , 30__

**3)** 21 , 18

Factors of 21   __1 , 3 , 7 , 21__

Factors of 18   __1 , 2 , 3 , 6 , 9 , 18__

**4)** 39 , 33

Factors of 39   __1 , 3 , 13 , 39__

Factors of 33   __1 , 3 , 11 , 33__

**5)** 33 , 8

Factors of 33   __1 , 3 , 11 , 33__

Factors of 8   __1 , 2 , 4 , 8__

**6)** 42 , 28

Factors of 42   __1 , 2 , 3 , 6 , 7 , 14 , 21 , 42__

Factors of 28   __1 , 2 , 4 , 7 , 14 , 28__

**7)** 27 , 8

Factors of 27   __1 , 3 , 9 , 27__

Factors of 8   __1 , 2 , 4 , 8__

**8)** 9 , 16

Factors of 9   __1 , 3 , 9__

Factors of 16   __1 , 2 , 4 , 8 , 16__

**9)** 6 , 36

Factors of 6   __1 , 2 , 3 , 6__

Factors of 36   __1 , 2 , 3 , 4 , 6 , 9 , 12 , 18 , 36__

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