Common Factors and Highest Common Factor

A. Choose the correct answer:

1. What is the HCF of 12 and 16?

a) 2   b) 4

c) 6   d) 8

2. Which of the following is a common factor of 15 and 25?

a) 4   b) 5

c) 6   d) 3

3. What is the HCF of 9 and 27?

a) 3   b) 6

c) 9   d) 27

4. Which number is a common factor of 18 and 24?

a) 8   b) 6

c) 9   d) 5

5. Which is the highest common factor of 10 and 20?

a) 2   b) 4

c) 5   d) 10

B. Write the Missing Terms to Complete the Sentences:

1. The common factors of 8 and 12 are 1, 2 and ____

2. HCF stands for Highest ____ Factor

3. The HCF of 6 and 9 is ____

4. Common factors of 10 and 15 are 1 and ____

5. If two numbers have only 1 as a common factor, they are called ____

C. Mark each sentence with a True (✔) or False (✗):

1. HCF of 10 and 15 is 5   _____

2. Common factor of 14 and 28 is 7   _____
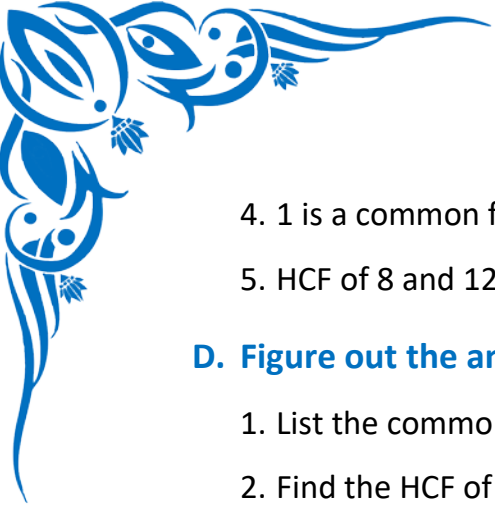
3. HCF of 4 and 9 is 2   _____

4. 1 is a common factor of all numbers   _____

5. HCF of 8 and 12 is 4   _____

D. Figure out the answers to these questions:

1. List the common factors of 18 and 30

2. Find the HCF of 20 and 28 by listing all factors

3. Circle the common factors of 16 and 24 from the list: 1, 2, 4, 6, 8

4. A boy has 12 red balloons and 18 green balloons. He wants to group them equally. What is the highest number of groups he can make?

5. Find the HCF of 36 and 48 using listing method

E. Challenge yourself with these questions:

1. Write all the common factors of 30 and 45

2. A girl has 24 pens and 32 pencils. What is the HCF of the two numbers?

3. Find the HCF of 50 and 75 by listing the factors

4. A school has two groups with 20 and 25 students. What is the maximum number of rows that can be formed equally?

5. List any 3 pairs of numbers whose HCF is 1