Reinforcement Worksheet

Topic: Factors and Multiples

Q1: Select 'T' for true and 'F' for false statement.

1) The smallest positive even prime number is 2. T / F

2) The highest factor of every number is number itself. T / F

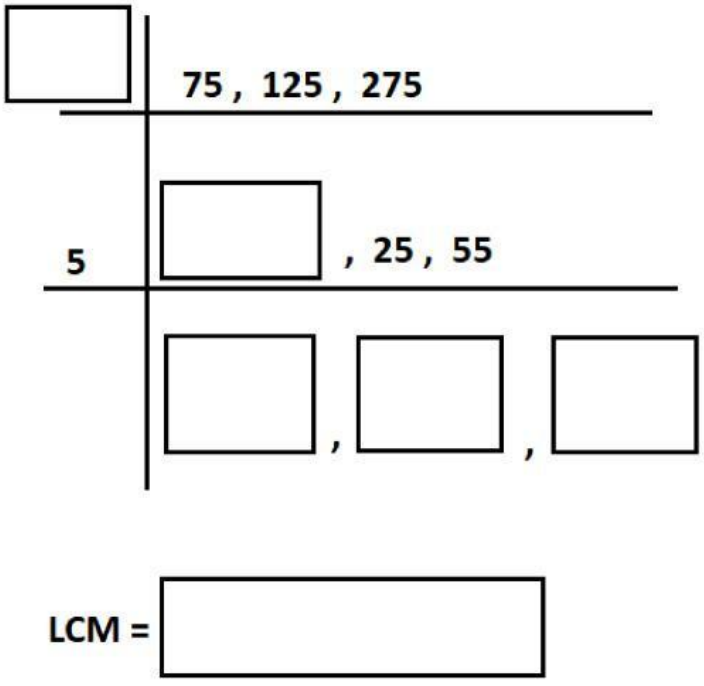
3) Factors of any number are uncountable. T / F

4) LCM of $2^2 \times 3$, 2^3 *and* $2^2 \times 3^2$ is 2^2. T / F

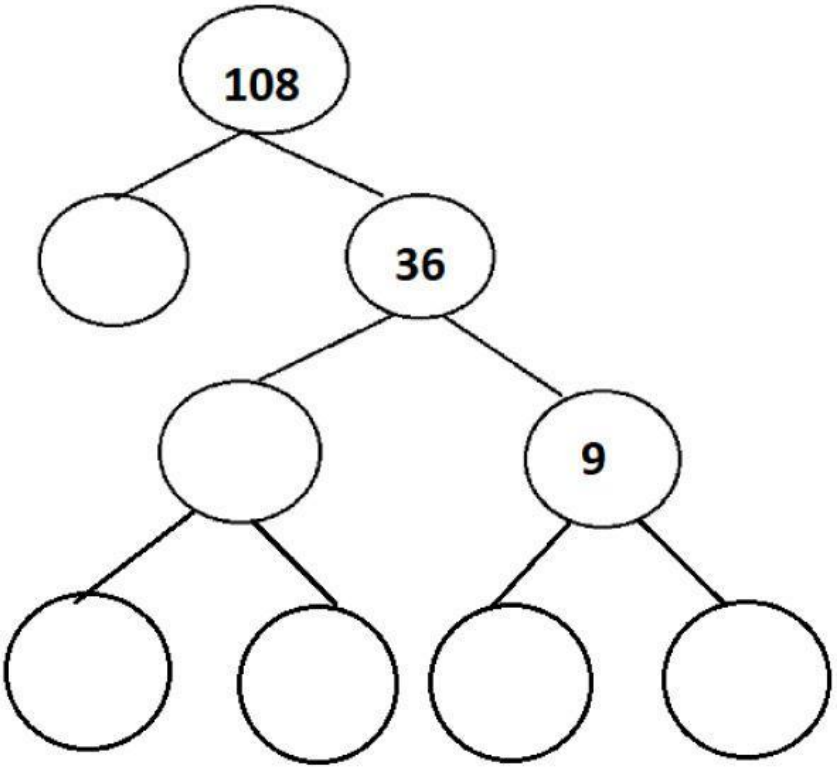
5) The prime factorization of 36 is 4 x 3 x 3. T / F

6) HCF of 5 and 7 is 35. T / F

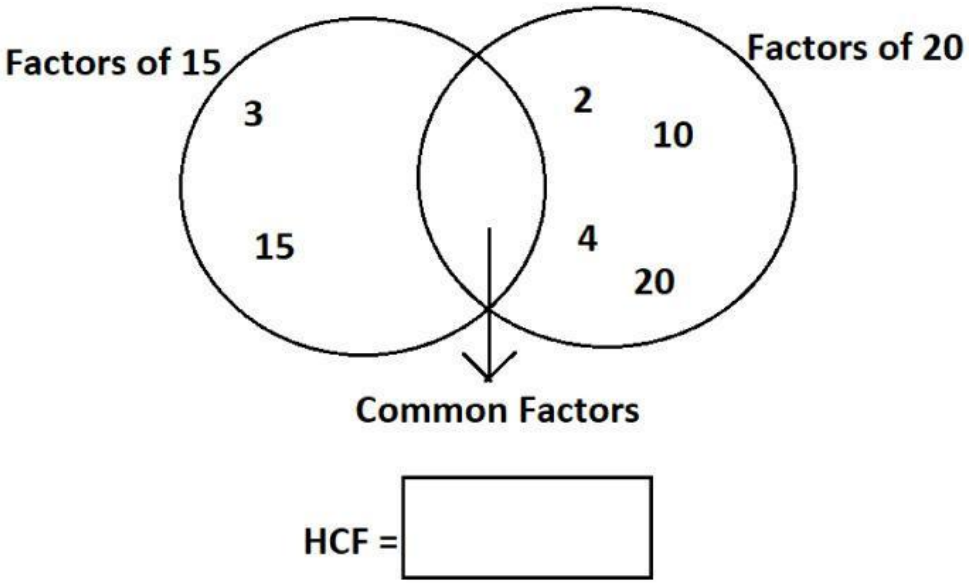
Q2: Complete the combined factorizations of given numbers and find LCM.



Q3: Complete the factor tree of 108.



Q4: Write the missing common factors of the numbers given in the Venn diagram.



Q5: Choose the best answer (only one) from given options.

1)The sum of first two odd multiples of 3 is:

a) 12 b) 4 c) 5 d) 9

2) The product of least whole number and largest even prime number is:

a) 2 b) 1 x 3 c) 0 d) 1 x 2

3) The product of LCM and HCF of two numbers is 72. If one number is 18 other number is

a) $\frac{72}{2}$ b) 72 x 18 c) $\frac{72}{18}$ d) 72 + 18

4) _____ is / are examples of co- prime numbers:

a) 2 , 3 b) 4 , 5 c) 10 , 27 d) all of these

5) Which of the following statements is correct about 4 x 5 = 20?

a) 20 is a factor of 4 c) 20 is a factor of 5

b) 20 is multiple of 4 & 5 both d) 4 is multiple of 5

6) A mother has three children who are 5, 10 and 15 years old. The age of mother is divisible by the age of each child. At least how old is the mother?

a) 50 b) 30 c) 40 d) 75

Q6: Read the given word problems carefully and then guess how will you find out the solution to each of them.

1) There are 15 chocolate cakes and 35 vanilla cakes. They all are to be arranged in rows such that each row has same flavor cakes and there is equal number of cakes in each row. Find the maximum number of cakes we can have in each row. **LCM / HCF**

2) Amir can jump 4steps at a time and Ahmed can jump 6steps at a time. After how many steps will they meet each other next if they both started jumping together?

LCM / HCF

3) Three alarms ring at interval of 15min, 10 min and 20min respectively. After how long will they ring together next if they started ringing simultaneously at 3:00 am for the first time. **LCM / HCF**

4) Find the shortest distance that can be exactly measured with 15m, 30m and 42m long measuring scales respectively.

LCM / HCF