



Daffodil International School- EV

Class: VI, Subject: Mathematics

Worksheet: 3:Chapter: Trees of Prime Factor

1. Answer the following question. [Each Question contains 2 marks]
 - a) Mina and Rina have 8 pens 12 erasers and 24 pencils. What is the highest number of children among whom these can be equally distributed?
 - b) Three bells ring every 14 minutes, 21 minutes, and 35 minutes respectively. What is the minimum time after which the three bells ring at the same time?
 - c) What is the highest number of persons among whom 3 bananas, 6 mangoes, and 9 guavas can be equally distributed?
 - d) If two ribbons of lengths 35 m and 49 m are equally cut into smaller portions, then what is the maximum length of each portion?
 - e) Two sheets of length 27 cm and 72 cm are cut into pieces of equal size, what will be the maximum length of each piece of the two sheets?
 - f) What is the maximum length of rope used to measure two roads of 105 m and 135 m?
 - g) Two walls of equal lengths are to be built using square boxes of lengths 16 cm and 28 cm. What is the minimum height of the two walls?
 - h) What is the minimum number of students that can be arranged in groups of 3, 4, 6 and 8, so that no one is left out?
 - i) The capacity of the three drums is 225 L, 375 L, and 525 L of water respectively. What is the highest capacity of a pitcher in liters by which the three drums can be filled up exactly?
 - j) The product of two numbers is 3380 and their HCF is 13. Determine the LCM of the two numbers.
2. Choose the correct answer of the following questions. [Each Question contains 1 marks]
 - 1) The length of a bar of iron and copper are 672 cm and 960 cm respectively. How long will the largest piece cut from both the bars will be n cm?
 - a) 96
 - b) 72
 - c) 79
 - d) 60
 - 2) For two different numbers A and B, if A is a multiple of B, then-
 - i) B will be a factor of A
 - ii) A will be completely divisible by B
 - iii) B will be completely divisible by AWhich of the following is correct?
 - a) i & ii
 - b) i & iii
 - c) ii & iii
 - d) i, ii & iii
 - 3) Among how many boys can 125 oranges and 145 bananas be divided equally?
 - a) 29
 - b) 25
 - c) 9
 - d) 5
 - 4) What is the HCF of 28, 48, and 72?
 - a) 4
 - b) 8
 - c) 7
 - d) 9
 - 5) The number 54 is a multiple of the number ____
 - a) 36
 - b) 27
 - c) 19
 - d) 17

C/Q:

1. The floor of a square-shaped house is made of rectangular cement blocks. The length, width, and height of each block are 15cm, 12cm and 6 cm respectively.

- a) LCM and HCF of two numbers are 72 and 6 respectively. If one number is 18, what is the other number?
- b) Find the maximum length of a stick to accurately measure the length, width and height of each cement block?
- c) What should be the minimum area of the floor of the square-shaped house so that no tiles need to be broken?

2. Mr. Azad gave taka 105 , taka 70 and taka 56 to his three younger brothers Meraz, Rizvi and Nadim respectively.

- a) Find the prime factors of the amount of money that Meraz got.
- b) Find the smallest number to which if 31 is added, the sum will be completely divisible by the amount of money that Meraz, Rizvi, and Nadim got.
- c) Using the division method, find the HCF of the amount of money that Meraz, Rizvi and Nadim got.

3. Among two bells, one bell rings after every 12 minutes and the other bell rings after every 5 minutes. Both bells ring together at 3:00 pm.

- a) The second bell rings after how many seconds?
- b) Next when both bells will ring together again?
- c) If 2nd bell rings every 8 minutes and both bells ring together at 6:48 pm, then next when both bells will ring together again?