

KV teaches workshop in Mathematics education

1. Krishna likes to give puzzles to people. During Diwali, he helped his mother in making laddus. When his mother asked him, how many laddus did he make, he said, "I made less than 30 but more than 15 laddus. And the number of laddus I made was a common multiple of 2 and 5." How many laddus did Krishna make?
2. Sara and Urmila were playing a number game. They had the following number chart. Each of them used to think of a number from the chart and then gave clues about the number. The other one had to guess the number.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Fill in the blanks:

(i) Sara: My number is a common multiple of 2, 3 and 4.

Urmila: _____

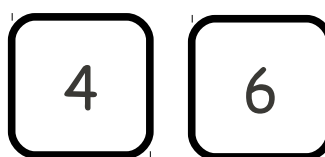
(ii) Urmila: My number is a common multiple of 3 and 5.

Sara: _____

(iii) Sara: My number is a factor of 12 and 14 both.

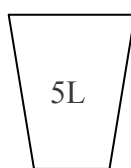
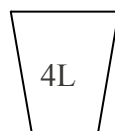
Urmila: _____

3. The numbers of Mr. Sharma's house fell down because of Suppandi. Suppandi wants to put the numbers back before Mr. Sharma comes back. But all Suppandi remembers is that the house-number was a multiple of 4. Can you help Suppandi?



4. A milkman has two milk containers containing milks of 10 L and 15 L each. Which of the following measuring flask should you take to check the exact content.

- a) 2 L
- b) 4 L
- c) 5 L



5. Anuja is buying chocolates for her birthday. Milk chocolates are sold in packets of 10 and Dark chocolates are sold in packets of 8. What is the smallest number of Milk chocolates and Dark chocolates she can buy to have an equal number of each.

6. Rithik and Rehana bought Bats of lengths 60 cm and 48 cm respectively. They want to measure the length of each, which of the following straight-edge they would use:

- a) 8 cm
- b) 10 cm
- c) 12 cm
- d) 15 cm

Which is the longest scales among the selected one?

7. Helen has 12 red, 18 green and 30 blue candles. She wants to pack them in packets to sell. What is the maximum number of candles she can put in a packet so that different types of candles are not packed together and each packet has equal number of candles.



8. Sharmila and Pushpa are making necklaces from beads. Sharmila puts 1 yellow bead after every 2 red beads. Pushpa puts 1 yellow bead after every 4 red beads. At what positions will the two necklaces have yellow beads? Guess and tell the positions where there will be yellow beads in both the necklaces?

9. During Diwali, Surabhi decorated her house with coloured bulbs(*Jhalar*). This *Jhalar* has 3 different kinds of bulbs; red, green and blue. These bulbs lit up after every 2 seconds, 3 seconds and 4 seconds respectively.

Find the time

- (a) when all the bulbs in the *Jhalar* lit up
- (b) when no bulb is lit
- (c) only two coloured bulbs are lit
 - (i) red and blue -
 - (ii) blue and green -
 - (iii) red and green -
- (d) If she switches on the *Jhalar* at 6:30, at what time will all the bulbs lit up for the first time?

10. Children are making a rectangular tri-colour flag using squares of side 2 cm – orange, side 3cm – white and side 5 cm – green. Find the minimum length of the flag?