



**SUBJECT: MATHEMATICS**

**CLASS :VIII**

**OCTOBER 2026**

## **COMPUTATIONAL THINKING WORKSHEET**

### **Chapter 7: Proportional Reasoning-I**

1. A fruit basket has different fruits, Bananas, Apples, Cherries, and Strawberries.

- The bananas are  $\frac{1}{3}$  the number of cherries and twice that of apples
- The strawberries are 4 more than the number of apples
- The number of fruits of each variety are all even numbers less than 15

Based on the above statement, fill in the blank with the appropriate fruit name. For every 3 strawberries, there are proportionately 6 \_\_\_\_\_.

- a) Bananas                      b) Apples                      c) Cherries                      d) All of the above

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2. There are two unknown proportional ratios,  $A : B$  and  $C : D$ , where A, B, C, and D are DIFFERENT single-digit numbers.

- A is 2 less than C
- D is 3 times B

What is the HIGHEST difference between any two values among A, B, C, and D?

- a) 2                      b) 3                      c) 4                      d) 5

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3. A mixture contains milk and water. When 15 litres of water is added to it, the total quantity of the mixture becomes 120 litres, where the quantity of milk and water have the LEAST POSSIBLE DIFFERENCE between them. Now, an additional 35 litres of mixture having the same milk-to-water ratio as the original mixture is added to this new mixture. What will be the ratio of milk to water in the final mixture?

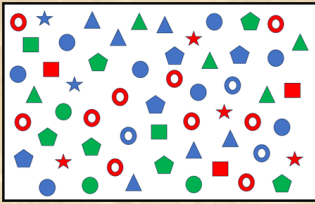
- a) 1:1                      b) 5:6                      c) 15:16                      d) 16:15

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4. Six friends A, B, C, D, E, and F are standing in a straight line positioning from 1 to 6 (from left to right).

- The positions of A and C are in 1 : 2 ratio
- E is at an extreme end and F is at an odd numbered position
- B is next to D
- The positional ratios of D to E are in proportion to C to B What is the position of F?

- a) 1                      b) 3  
c) 5                      d) Cannot be determined
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5. In the image given below, the ratio of blue stars to red stars is 1 : 2. Similarly, answer the following question based on the image.  
What should replace the question mark so that the ratios are in proportion?



$$\text{Red Square} : \text{Blue Triangle} :: ?$$

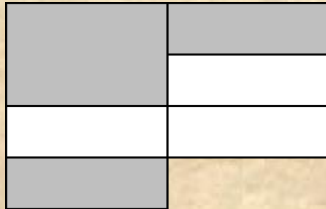
a)  $\text{Green Triangle} : \text{Blue Pentagon}$

b)  $\text{Red Star} : \text{Green Circle}$

c)  $\text{Green Triangle} : \text{Red Circle}$

d)  $\text{Red Star} : \text{Blue Circle}$

6. Find the ratio of unshaded (white) rectangles to ONLY PARTIALLY shaded (grey + white) rectangles in the figure given below.



a) 1 : 2

b) 5 : 6

c) 5 : 7

d) 4 : 7

7. Three children have ages in the ratio 2 : 3 : 4. Each receives pocket money equal to Rs. 5 less than their age, and together they have Rs. 30.

How much minimum extra money should be added so that their final amounts are in the same ratio as their ages?

a) Rs. 4

b) Rs. 6

c) Rs. 8

d) Rs. 12

8. In a digital clock of HH : MM format, how many times the time will be as such the HH : MM ratio will be in proportion to 1 : y where y is a single digit number?

(Here, the clock is in 12 hour format, where HH : MM will be 00-12 : 00-59)

a) 49

b) 89

c) 81

d) 101

9. A fruit seller sells apples and mangoes to 10 customers:

- The price per dozen of apples and mangoes is in the ratio 3 : 5
- Each customer buys a pack in which the number of apples and mangoes is in the ratio 1 : 3, and both quantities are multiples of 4
- The price of each fruit is a whole number greater than 10

If the total amount collected from all the customers is ₹8064, what is the MAXIMUM possible number of packs sold to a customer?

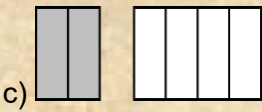
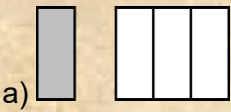
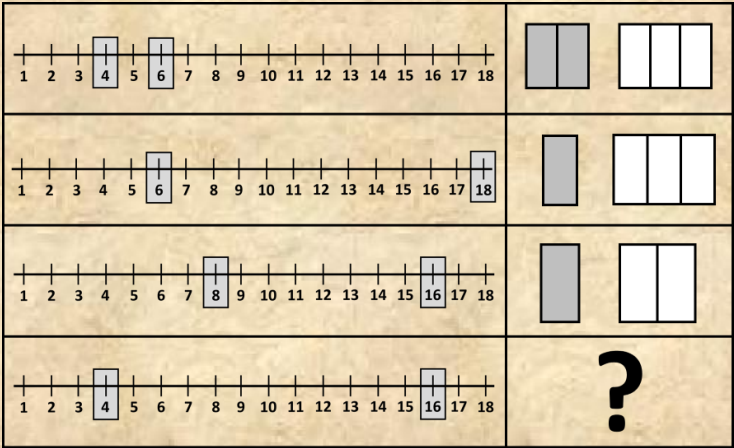
a) 24

b) 18

c) 21

d) 19

10. What will come in place of "?"





## The Thinking Spot

Sam arranged the following 4 blocks vertically, one on top of another, such that

- There are at least 2 blocks below the block having a circle
  - The block with a triangle has at least 1 block above it
  - The block having a rectangle is immediately above the block having a star
- How many different arrangements satisfy all the above conditions?



(a) 0



(b) 1



(c) 2

(d) 3

