Name: _____   Date: _____

Problem Sum Worksheet

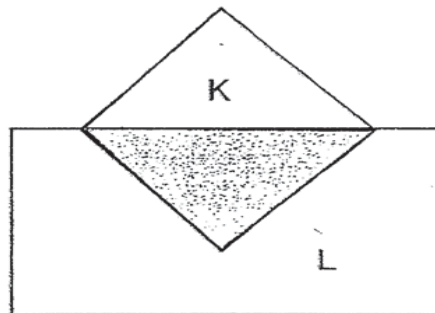**Topic : Ratio**

Video Solution: https://www.omyclassroom.com/ratio-56.html

Topic 1 : Ratio of overlapping shapes - Qn 1 (Difficulty: High)

Square K and Rectangle L overlap to form the figure below. The ratio of the area of the shaded part to the area of Square K to the area of Rectangle L is 1 : 2 : 5. The area of Rectangle L is 105 cm².

(a) Find the area of the shaded part.

(b) Find the area of the whole figure.

Topic 2: Same unit – Qn 1 (Difficulty : Low)

Joe, Kenneth and Louis shared a box of cards in the ratio 7 : 9 : 5. Joe and Louis had 384 cards altogether. How many cards did the three boys share altogether?

Topic 2: Same unit – Qn 2 (Difficulty : Medium)

The ratio of the number of mangoes to the number of pears was 6 : 5 at first. There were 89 fewer pears than mangoes. 28 mangoes turned bad. How many mangoes were there in the end?

Topic 2: Same unit – Qn 3 (Difficulty : Low)

The ratio of the number of adults to the number of children at the zoo was 2 : 1. There were 885 boys and 637 girls at the zoo. Altogether, how many people were at the zoo?

Topic 2: Same unit – Qn 4 (Difficulty : Medium)

At an exhibition, the ratio of the number of adults to the number of children was 7 : 4. There were 108 more adults than children. After some time, 35 adults and 24 children left the exhibition. How many people remained at the exhibition?

Topic 2: Same unit – Qn 5 (Difficulty : Low)

The population of Country X is 19 800. The ratio of the number of men to women is 4 : 5. Find the number of men in Country X.

Topic 2: Same unit – Qn 6 (Difficulty : Medium)

Mr Lim has 3 children, Abby, Ben and Cindy. He gave them $\frac{2}{5}$ of his savings in the ratio of 2 : 3 : 5. Ben received $440 less money than Cindy. How much was Mr Lim's savings at first?

Topic 2: Same unit – Qn 7 (Difficulty : Medium)

A fruit stall sells apples, oranges and pears. The ratio of the number of pears to the total number of fruits is 2 : 5. There are 300 apples and 180 oranges.

(a) Find the number of pears at the stall.

(b) Pears are sold at 4 for $1. Apples are sold at 10 for $2. Oranges are sold at 6 for $1.50. How much money could be collected from the sale of all the fruits at the stall?

Topic 2: Same unit – Qn 8 (Difficulty : Medium)

Ailing, Bill & Carmen shared a sum of money in the ratio of 4 : 5 : 9. Ailing was given more money by her mother and she had 4 times as much money as before. Bill spent $\frac{2}{5}$ of his money and Carmen spent $\frac{1}{3}$ of her money. The total amount of money the three of them had in the end increased by $294. What was the total amount of money they had in the end?