**Mixture and Alligations**

**Rule to solve**

1. In what ratio should two varieties of sugar of Rs.18 per kg and Rs.24 kg be mixed together to get a mixture whose cost is Rs.20 per kg?
2. Two vessels A and B contains spirit and water in the ratio 5: 2 and 7:6 respectively. Find

the ratio in which these mixture be mixed to obtain a new mixture in the vessel C

containing spirit and water in the ratio 8:5?

1. How many liters of oil at Rs.40 per liter should be mixed with 240 liters of a second variety of oil at Rs.60 per liter so as to get a mixture whose cost is Rs.52 per liter?

**Quantity Added**

1. In a 729 litres mixture of milk and water, the ratio of milk to water is 7 : 2. to get a new mixture containing milk and water in the ratio 7 : 3, the amount of water to be added is:
2. A beaker contains acid and water in the ratio 1 : x. When 300 ml of the mixture and 50 ml of water are mixed, the ratio of the acid and the water becomes 2 : 5. What is the value of x?

**Based on replacement**

1. A container contains 40 liters of milk. From this container 4 liters of milk was taken out

and replaced by water. This process was repeated further two times. How much milk is

now contained by the container?

1. A can contains a mixture of two liquids A and B is the ratio 7 : 5. When 9 liters of

mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7 : 9.

How many liters of liquid A was contained by the can initially?

1. A jar full of whisky contains 40% alcohol. A part of this whisky is replaced by another

containing 19% alcohol and now the percentage of alcohol was found to be 26%. The

quantity of whisky replaced is: