

Aptitude

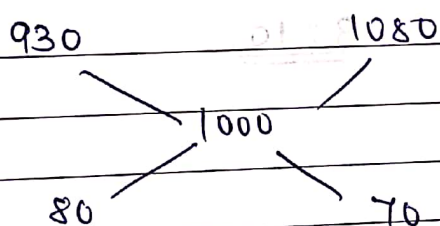
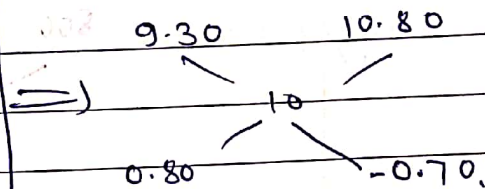
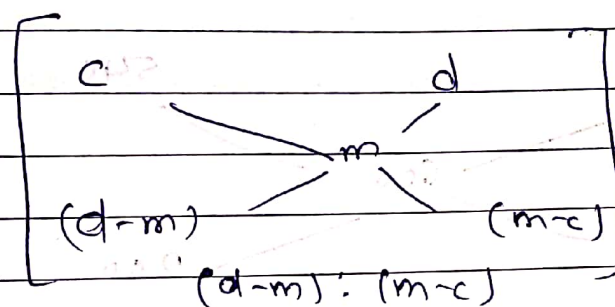
27-09-19

Q. In what ratio must rice at Rs 9.30 per kg be mixed with rice at Rs 10.80 per kg? so that the mixture be worth Rs 10 per kg.

Rs 9.30

Rs 10.80

Rs 10

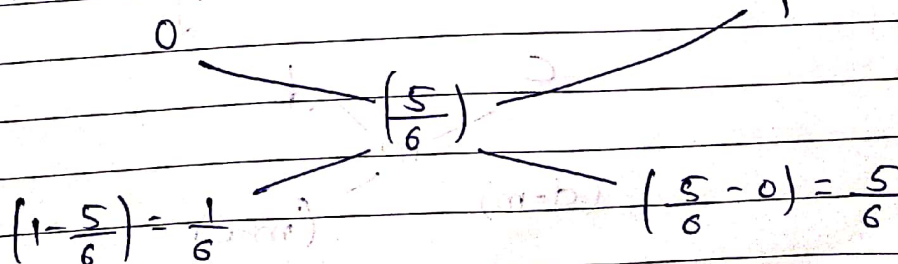


$\therefore$ Ratio = 80 : 70 = 8 : 7

Q. In what ratio must water will mixed with milk to gain 20% by selling the mixture at cost price.

CP of 1 lit of mixture = $\text{Rs } \left(\frac{100}{120} \times 1 \right) = \frac{5}{6}$

CP of 1 lit water = 0 CP of 1 lit of milk = 1

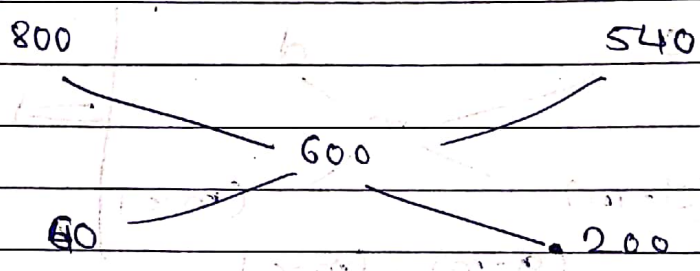


$\therefore$ Ratio of water of milk = $\frac{1}{6} : \frac{5}{6} = 1 : 5$

Q. How many kgs of wheat costing ₹ 8 per kg must be mixed with 36 kgs of wheat costing ₹ 5.40 per kg so that 20% gain may be obtained by selling the mixture at ₹ 7.20 per kg.

~~36~~
~~8~~ $\frac{100 \times 7.20}{120}$

CP of 1kg wheat = $\left(\frac{5}{6} \times 7.20 \right) - \frac{36}{6} = ₹ 6.$



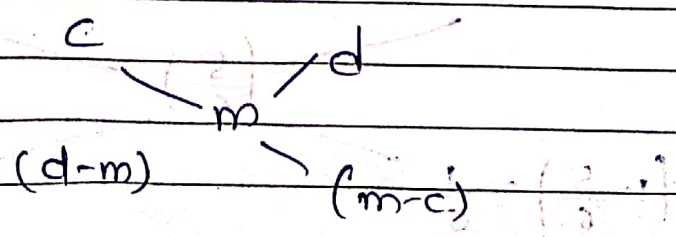
$\Rightarrow 60 : 200 = 3 : 10$

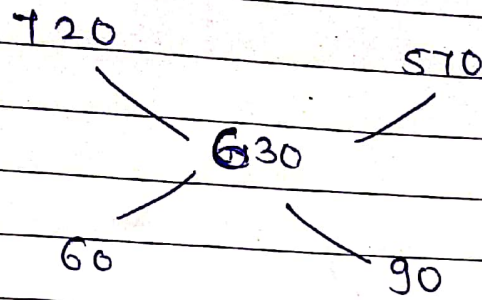
$\Rightarrow \frac{x}{36} = \frac{3}{10}$

$x = \frac{3 \times 36}{10}$

∴ 10.8 kg

Q. Find the ratio in which rice at ₹ 7.20 a kg be mixed with a rice at ₹ 5.70 a kg to produce a mixture worth ₹ 6.30 a kg.

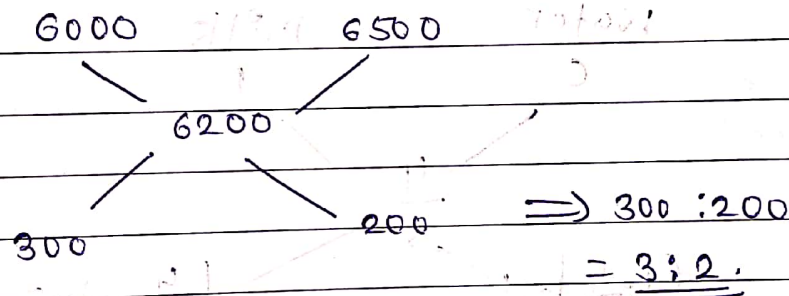




$$\Rightarrow 60 : 90 \\ = \underline{\underline{2 : 3}}$$

Q. In what ratio must a grocer mix two varieties of tea worth Rs 60 a kg & Rs 65 a kg so that by selling the mixture at Rs 68.20 a kg he may gain 10%.

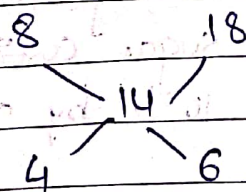
$$\text{CP of 1 kg tea} = \left(\frac{100}{110} \times 68.20 \right) = 62$$



$$\Rightarrow 300 : 200 \\ = \underline{\underline{3 : 2}}$$

Q. A merchant has 1000 kg of sugar, part of which he sells at 8% profit & the rest at 18% profit. He gains 14% on the whole. The quantity sold at 18% profit is:

- a) 400 b) 500 c) 600 d) 700.



$$\therefore \underline{\underline{2 : 3}}$$

Q. A dishonest milkman professes to sell his milk at CP but he mixes it with water & thereby gains 25%. The %age of the water in the mixture is

water

milk

$$\frac{100}{125} = \frac{4}{5}$$

water

milk

0

1

$\frac{4}{5}$

$$(1 - \frac{4}{5}) = \frac{1}{5}$$

$$(\frac{4}{5} - 0) = \frac{4}{5}$$

∴ 1:4

$$\therefore \text{Water} = \left[\frac{1}{5} \times 100 \right] = \underline{\underline{20\%}}$$

Q. How many kg of sugar costing Rs 9 per kg must be mixed with 27 kg of sugar costing Rs 7 per kg so that there may be a gain of 10% by selling the mixture at Rs 9.24 per kg

a) 6 kg

b) 8 kg

c) 13 kg

d) 64 kg