ALL BRANCH (English)

General Aptitude

Quantitative Aptitude

DPP 05 Discussion Notes

Mixtures Alligations

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MCQ

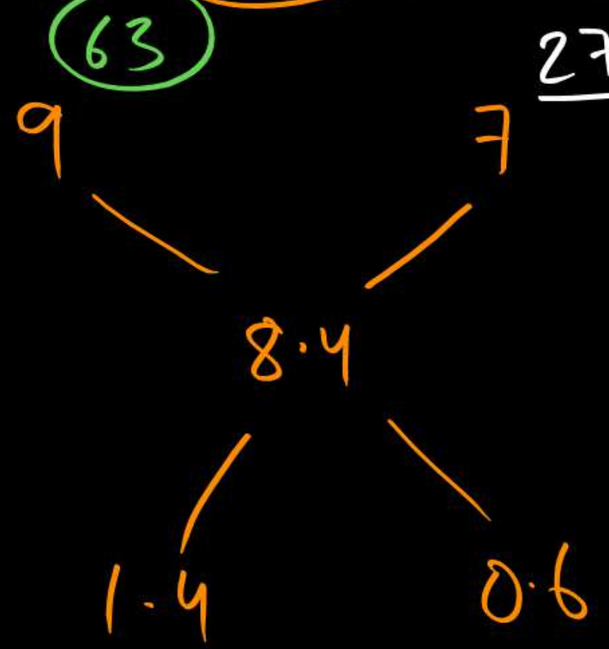
How many Kg of rice costing ₹9 per kg must be mixed with 27 kg of rice costing ₹7 per kg so that there may be gain of 10% by selling the mixture at ₹9.24 per kg?

A 63 kg

B 42 kg

C 54 kg

D 36 kg



14 : 6
= 7 : 3
× 9 × 9
= 63 : 27

SP = 9.24

P = 10%

$\frac{9.24}{C.P} = 1.1$

$(8.4) = \frac{92.4}{11} = \frac{9.24}{1.1} = C.P.$

MCQ

Two vessels P and Q contain milk and water mixed in the ratio 8:5 and 5:2 respectively. In what ratio these two mixtures are to be mixed to get a new mixture containing $69\frac{3}{13}\%$ milk?

A) 2 : 7

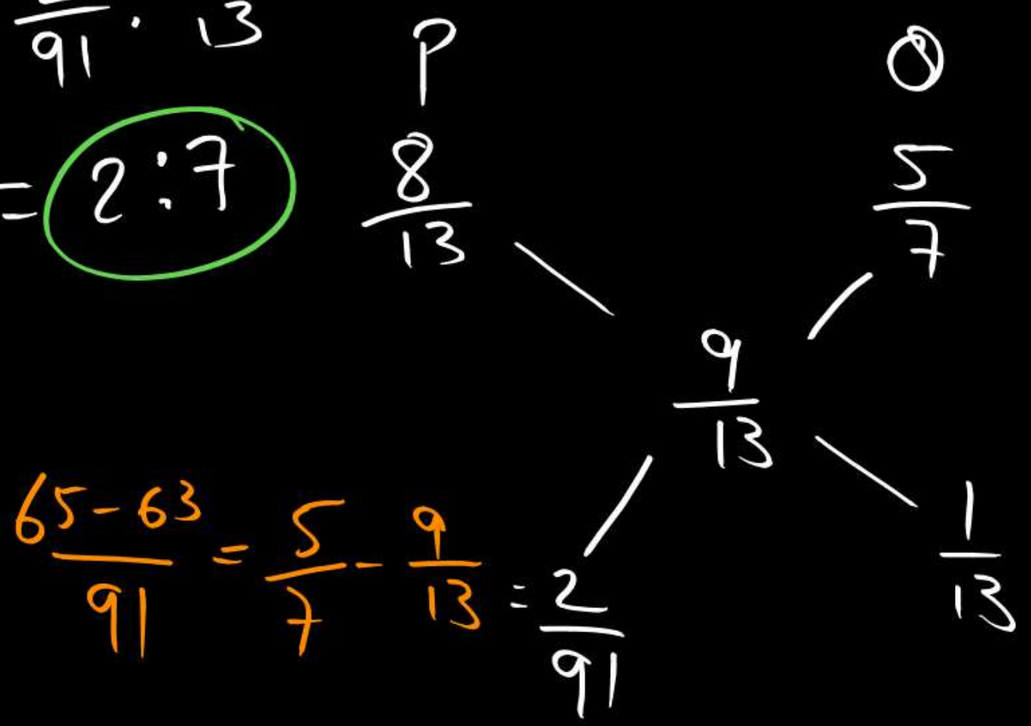
B) 5 : 7

C) 5 : 2

D) 3 : 5

$\frac{2}{91} : \frac{1}{13}$

$= 2 : 7$



$\frac{65-63}{91} = \frac{5}{7} - \frac{9}{13} = \frac{2}{91}$

$69\frac{3}{13}\%$

$= \frac{900}{1300} = \frac{9}{13}$

MCQ

In a mixture of 60 litres, the ratio of milk and water is 2:1. What amount of water must be added to make the ratio of milk and water as 1:2?

A 56 litres

B 42 litres

C 60 litres

D 77 litres

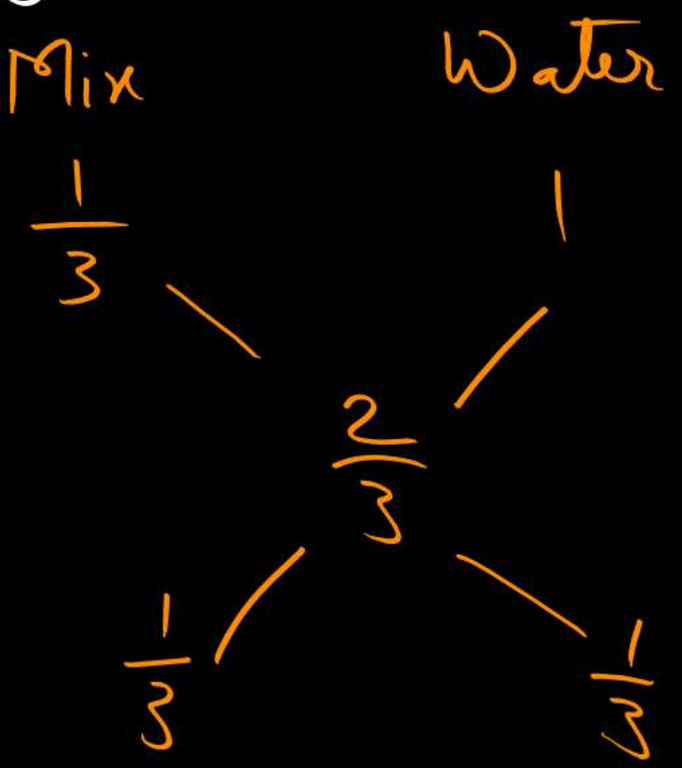
Mix : water

$= \frac{1}{3} : \frac{1}{3}$

$= 1 : 1$

$= 60 : 60$

60 lit



MCQ

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

A) 2 : 3

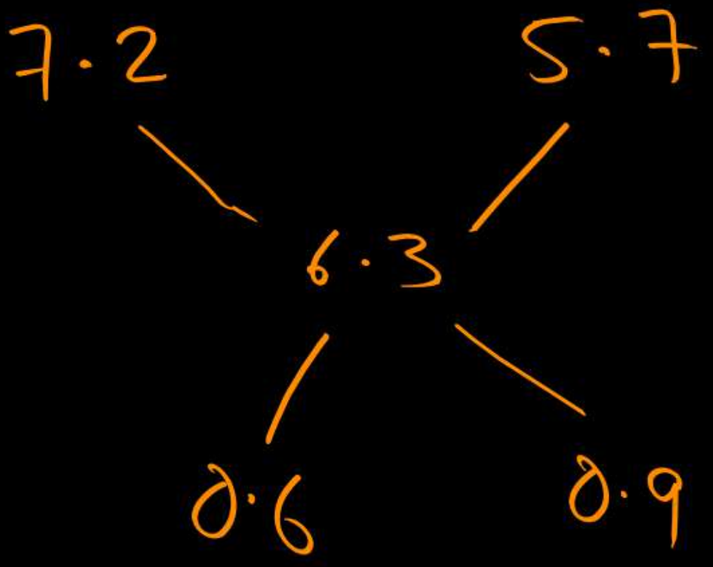
B) 3 : 4

C) 4 : 5

D) 1 : 3

6 : 9

= 2 : 3



MCQ

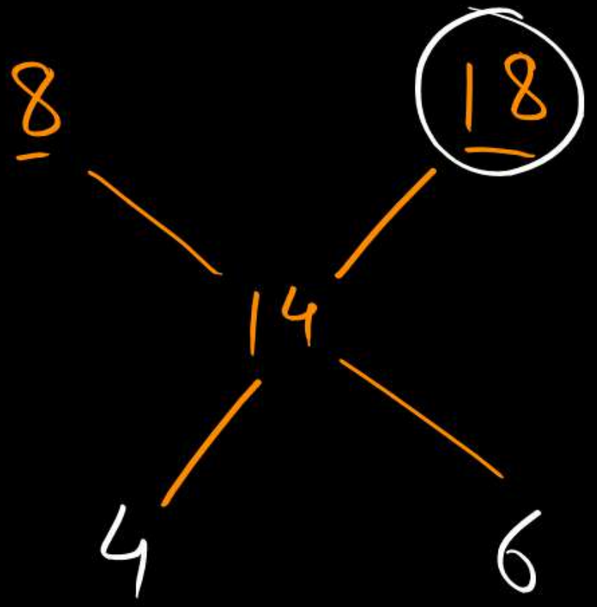
A merchant has 1000 kg of wheat flour, part of which he sells at 8% profit and the rest at 18% profit. He gains 14% on the whole. Find the quantity he sold at 18% profit.

A 400 kg

B 560 kg

C 600 kg

D 640 kg



4 : 6

= 2 : 3

$\frac{3}{5} \times 1000$

= 600

MCQ

One quality of sugar at ₹9.30 per kg mixed with another quality at a certain rate in the ratio 8:7. If the mixture so formed be worth ₹10 per kg, what is the rate per kg of the second quality of sugar?

A ₹10.30

B ₹10.60

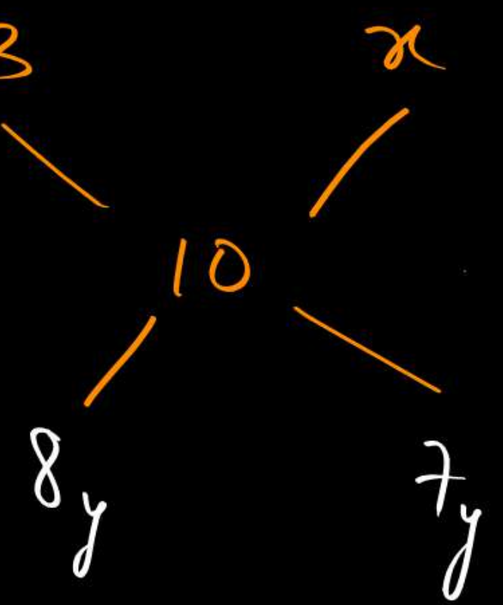
C ₹10.80

D ₹11

$$\frac{0.7}{x-10} = \frac{7}{8}$$

$$0.8 = x - 10$$

$$x = 10.8$$



MCQ

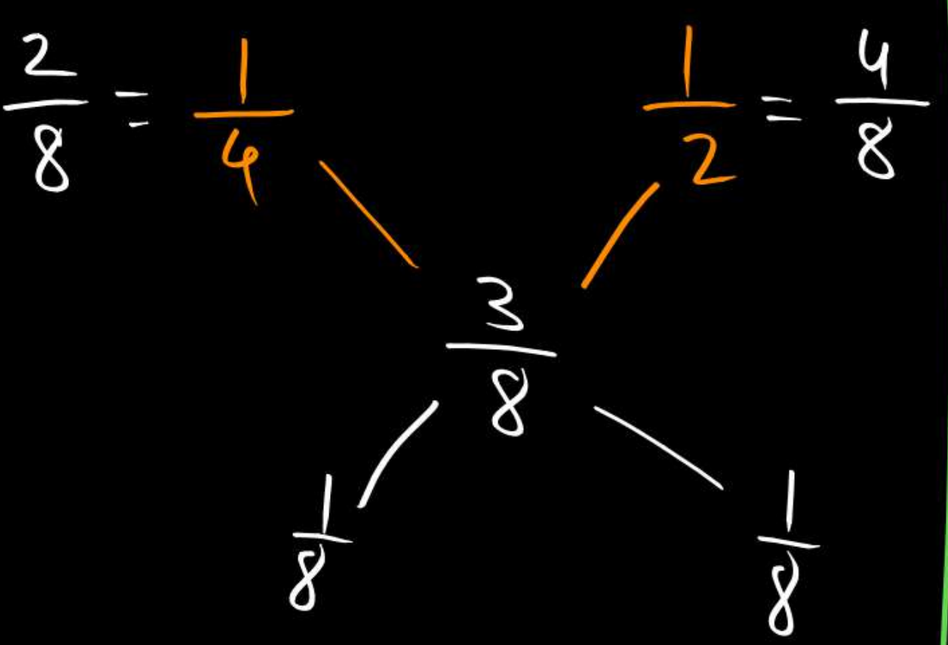
A milk vendor hs two cans of milk. The first contains 25% water and rest milk. The second 50% water. How much quantity should be mixed from each of the containers so as to get 12 litre of mixture where the ratio of water to milk is 3:5?

(A) 4 litre; 8 litre

(B) 6 litre; 6 litre

(C) 5 litre; 7 litre

(D) 7 litre; 5 litre



$\frac{1}{8} : \frac{1}{8}$

$= 1 : 1$

$= 6 : 6$

MCQ

Two vessels A and B contain Spirit and Water mixed in the ratio 5:2 and 7:6 respectively. Find the ratio in which these mixtures be mixed to obtain a new mixture in vessel C containing spirit and water in the ratio 8:5.

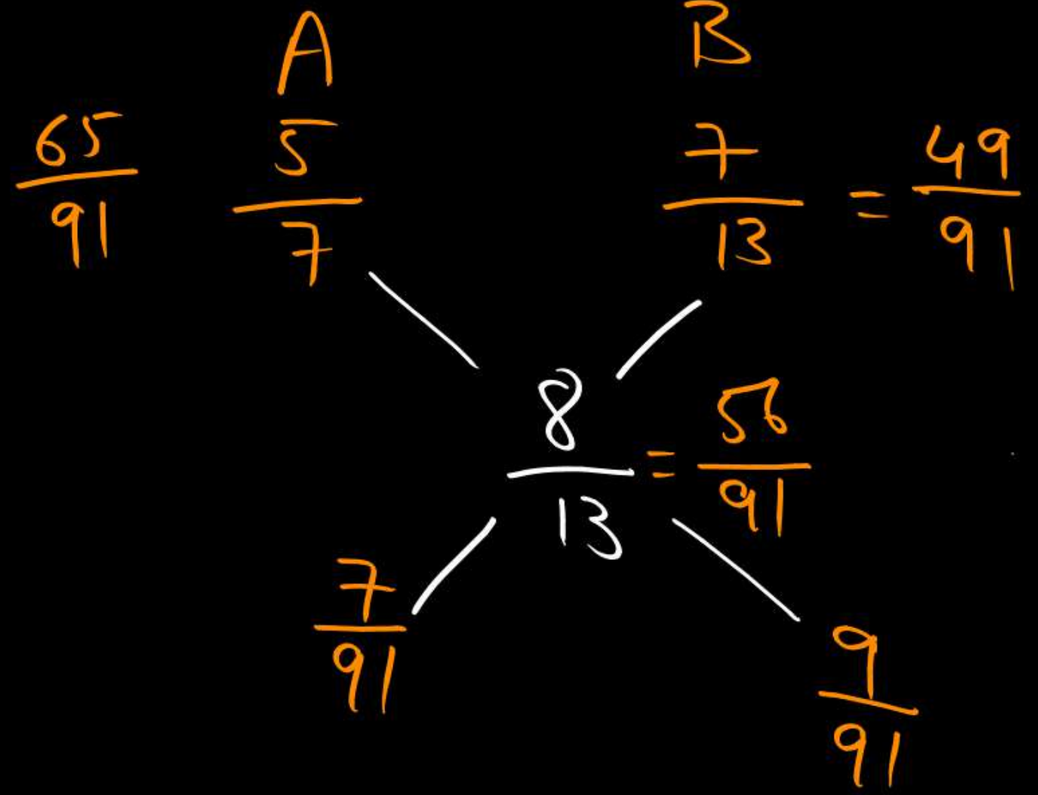
A 4 : 3

B 3 : 4

C 5 : 6

D 7 : 9

7 : 9



MCQ

In a mixture of 48 litre, the ratio of milk and water is 2 : 1 if this ratio is to be 1 : 3 then what is the quantity of water to be further added?

48

Mix : water

Mix Water

$\frac{1}{3}$ 1

$\frac{3}{4}$

$\frac{1}{4}$

$\left(\frac{3}{4} - \frac{1}{3}\right) = \frac{9-4}{12} = \frac{5}{12}$

$= \frac{1}{4} : \frac{5}{12}$

$= 3 : 5$

$\times 16 \quad \times 16$

$= 48 : 80$

A. 96 litre

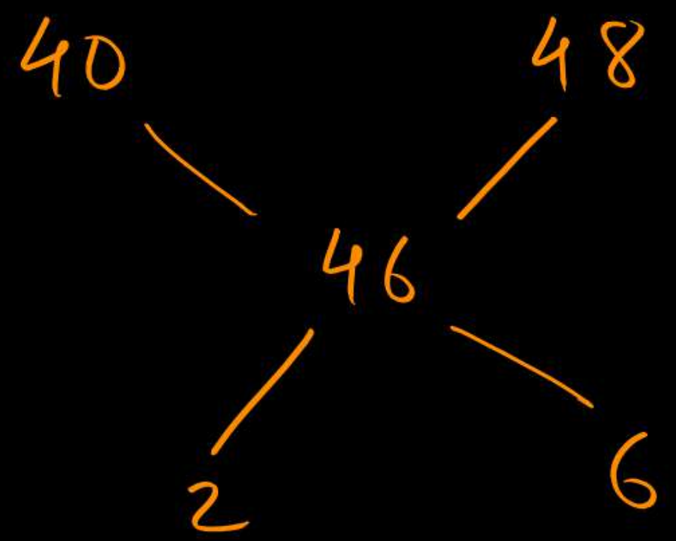
B. 72 litre

C. 60 litre

D. 80 litre

MCQ

In what ratio must a grocer mix two verities of rice worth ₹40 per kg and ₹48 per kg so that by selling the mixture at ₹50.6 per kg he may gain 10%?



2 : 6

1 : 3

S.P. = 50.6

P = 10%

$\frac{50.6}{C.P} = 1.1$

$46 = \frac{50.6}{1.1} = C.P$

A 1 : 2

B 1 : 3

C 2 : 3

D 4 : 1

Thank You!

GW Soldiers