BHARAT SCHOOL OF BANKING
MIXTURE AND ALLEGATION

1. A can contains a mixture of two liquids A and B in the ratio 7:5 when 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7:9. How many litres of liquid A was contained by the can initially?
A.28 litres
B.21 litres
C.45 litres
D.36 litres

2.A man travelled a distance of 90Km in 9 hours partly on foot at 8 kmph and partly on bicycle at 17 kmph. Find the distance travelled on foot.
A.46 km
B.56 km
C.62 km
D.52 km

3.A milk vendor has 2 cans of milk .The first contains 25% water and the rest milk. The second contains 50% water. How much milk should he mix from each of the container so as to get 12 litres of milk such that the ratio of water to milk is 3:5?
A.6 litres
B.1 litres
C.8 litres
D.7 litres

4. In what ratio must a person mix three kinds of wheat costing him Rs 1.20,Rs 1.44 and Rs 1.74 per Kg so that the mixture may be worth Rs 1.41 per Kg?
A.11:77:7
B.25:45:8
C.27:23:6
D.11:45:7

5.A painter mixes blue paint with white paint so that the mixture contains 10% blue paint.In a mixture of 40 litres paint how many litres blue paint should be added so that the mixture contains 20% of blue paint.
A. 2.5 litres
B. 4litres
C. 5litres
D.2 litres

Answers
1.   (B) Let initially contained 7x & 5x
So,
$(7x-9/12*7)/(5x-9/12*5+9)=7/9$

$(12x-9)/(60x+63)=1/9$

x=3

Required Quantity = 7x = 7*3=21 litres

2.   (B) Average Speed = 90/9=10kmph

So,

By Rule of Allegations

8		17

10

17 — 10 = 7		10 — 8 = 2
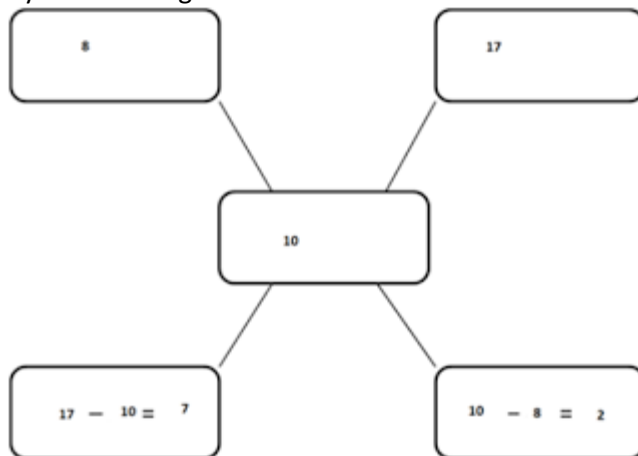
Required Distance = 7*8=56 km

3.   (A) Milk in 1st can = ¾

Milk in IInd can = ½

Milk in Resultant mixture = 5/8

So,

3/4		1/2

5/8

5/8 — 1/2 = 1		3/4 — 5/8 = 1
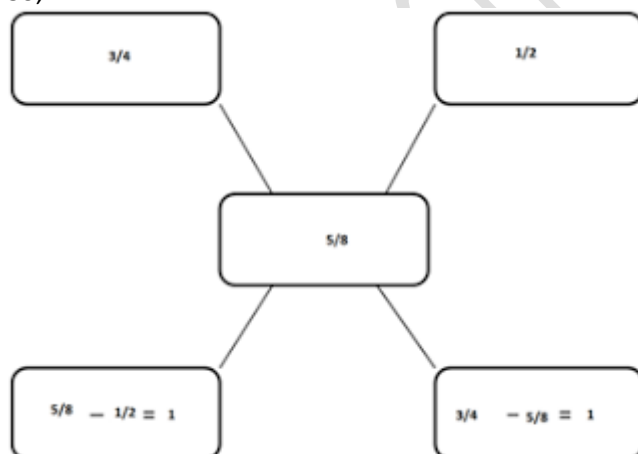
1 + 1 = 12

2 = 12

1 = 6 liter

4.   (A) In first case, We take 1. 20, 1.44 & 1. 41

So,

| 1.20 | | 1.44 |

| | 1.41 | |

| 1.44 — 1.41 = .03 | | 1.41 — 1.20 = .21 |
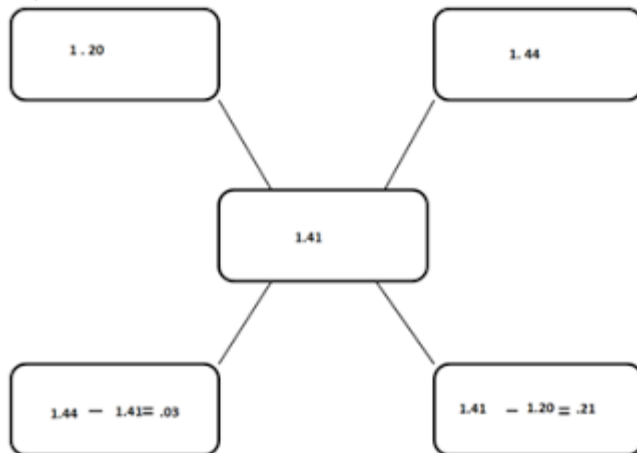
1:7

In second case, We take 1.20, 1. 74 & 1. 41

so,

| 1.20 | | 1.74 |

| | 1.41 | |

| 1.74 — 1.41 = 0.33 | | 1.41 — 1.20 = 0.21 |

11 : 7
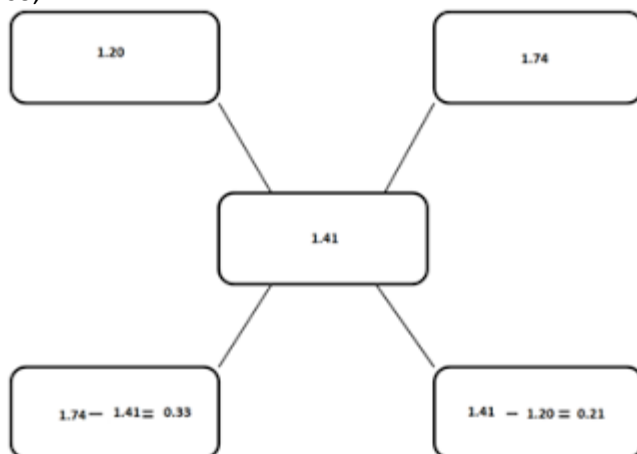
Since   I : II   = 1.7
I : III   = 11 : 7
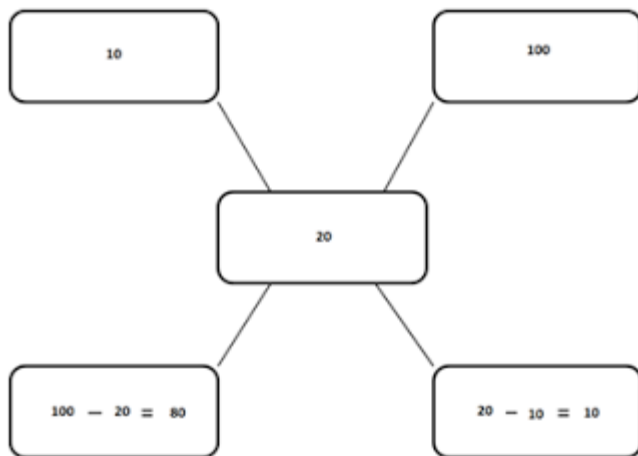So,   I : II : III   = 11 : 77 : 7

5.   (C) Percentage of blue point, in pure Blue point =100%

So,

BHARAT SCHOOL OF BANKING

MIXTURE AND ALLEGATION

```
┌──────────┐          ┌──────────┐
│    10    │          │   100    │
└──────────┘          └──────────┘
        \              /
         \            /
        ┌──────────────┐
        │      20      │
        └──────────────┘
         /            \
        /              \
┌──────────────────┐   ┌──────────────────┐
│ 100 — 20 = 80    │   │ 20 — 10 = 10     │
└──────────────────┘   └──────────────────┘
```

8 : 1

Since 8 = 40

1 = 5 liters