

Q1. Subtracting 6% of x from x is equivalent to multiplying x by how much?

[Level 1, Wipro]

- a. 0.094 b. 0.94 c. 9.4 d. 94

Ans: b

Solution:

$$x - 6\% \text{ of } x = 94\% \text{ of } x = 0.94x$$

Q2. What will be the actual profit percentage (rounded off to the nearest integer) after selling an article at a certain price, while there occurs a loss of 45% on selling the article at $\frac{3}{8}$ of the selling price?

[level 2, Accenture]

- 1) 17% 2) 37% 3) 47% 4) 27%

Ans: 3

Solution

Let the cost price be INR 100.

Loss = 45% of cost price = INR 45

Selling price = cost price – loss = $100 - 45 = \text{INR } 55$

As the product is sold at $\frac{3}{8}$ of the selling price,

Original selling price = $\frac{8}{3}$ of 55 = INR $\frac{440}{3}$

Actual profit percentage = $(\frac{440}{3} - 100) \frac{100}{100} = 47\%$.

Q3. A certain sum of money amounts to Rs. 704 in 2 years and Rs. 800 in 5 years. Find the principal.

[Level 2, Infosys]

- A.580 B.600 C.660 D.640

Ans: D

Solution:

Interest earned in 3 years = $800 - 704 = 96$

Interest earned in 1 year = 32

Interest earned in 2 years = 64

Principal = $704 - 64 = 640$

Q4. If $A:B = 2:3$, $B:C = 4:5$ and $C:D = 6:7$, then find the value of A: B:C: D [Level 2, Accenture]

- A. 15:24:30:35 B. 16:24:30:35 C. 17:24:30:35 D. 18:24:30:35

Ans: B

Solution:

$$A : B : C = 2 \times 4 : 3 \times 4 : 5 \times 3 \quad [\text{Equating B}]$$

$$A : B : C : D = 2 \times 4 \times 2 : 3 \times 4 \times 2 : 5 \times 3 \times 2 : 7 \times 5 \quad [\text{Equating C}]$$

$$= 16 : 24 : 30 : 35$$

Q5. Amit and Sumit start walking from the same point in opposite directions at speeds of 6 km/hr and 4 km/hr, respectively. How far will they be from each other after 4 hours?

[level 2, Accenture]

- 1) 500 m 2) 35 km 3) 40 km 4) 300 m

Ans: 3

Solution

Amit and Sumit start walking from the same point in opposite directions at speeds of 6 km/hr and 4 km/hr, respectively.

Their relative speed = $6 + 4 = 10$ km/hr

So, in 4 hours, they will travel = $4 \times 10 = 40$ km

Hence, the correct answer is 40 km.

Q6. Two trains A and B start running at 80 km/hr and 82 km/hr towards each other from two different stations. They meet after 1 hour and 30 minutes. How far were they from each other when they started?

[level 2, Wirpo. TechM]

1) 190 km

2) 262 km

3) 243 km

4) 224 km

Ans: 3

Solution

Relative speed = $80 + 82 = 162$ km/hr

Time taken = 1 hr 30 minutes = $\frac{3}{2}$ hr

Distance = $162 \times (\frac{3}{2}) = 243$ km

Q7. Two trains with a speed of 80 km/hr and 120 km/hr, respectively, are 500 km apart and face each other. Find the distance between them 10 minutes before crossing.

[Level 2, Wipro]

1) 72.33 km

2) 33.33 km

3) 63.33 km

4) 52.74 km

Ans: 3

Solution

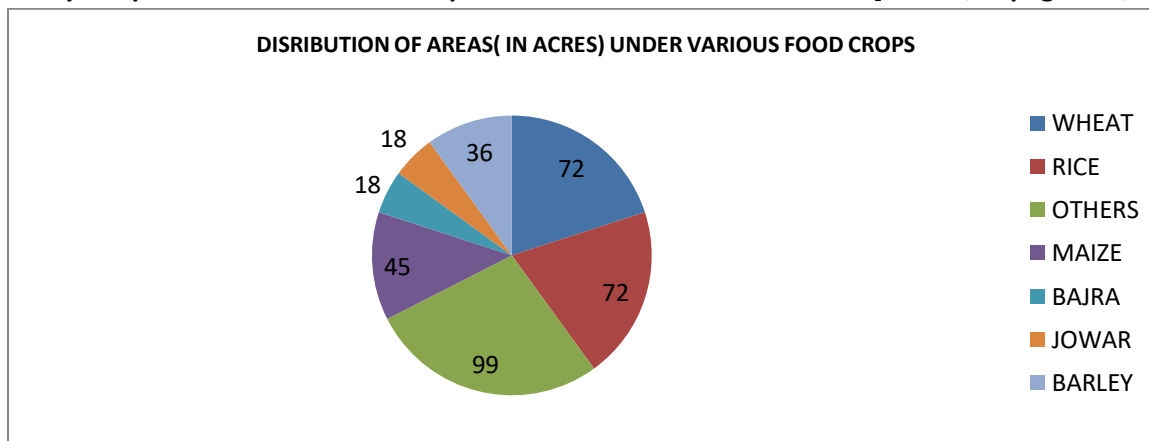
Relative speed = $80 + 120 = 200$ km/hr

Time = 10 minutes = $\frac{1}{6}$ hour

The distance to be covered in 10 minutes = $200/6$ km = 33.33 km

Q8: Directions: The following pie chart shows distribution of land (in a village) under various food crops. Study the pie chart and answer the questions that follow.

[Level 2, Capegemini, Wipro]



ALL VALUES GIVEN IN DEGREE

Which combination of three crops contribute to 50% of the total area under the food crops?

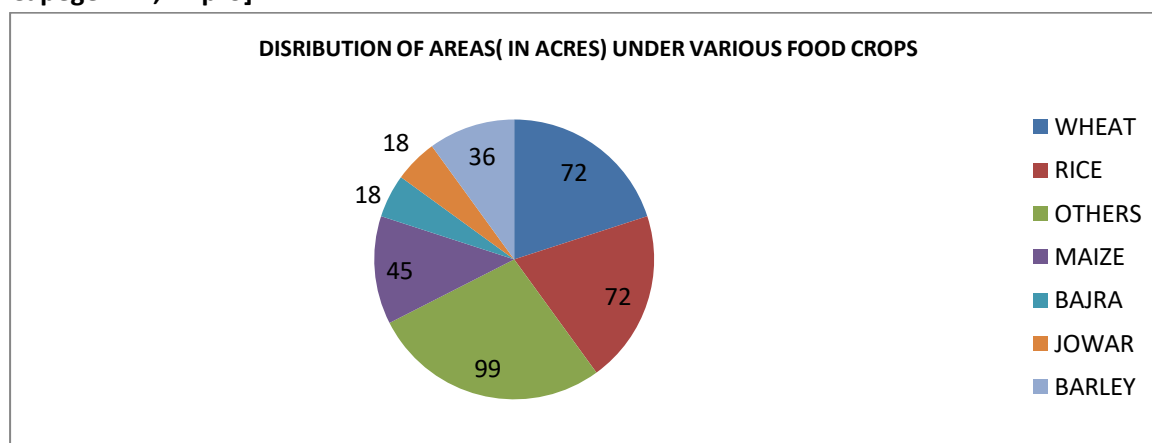
- a) wheat, barley, jowar b) rice, wheat, jowar
 c) Ric, wheat, barley d) Bajra, maize, rice

Ans: D

Solution:

Sum of the portion of three crops should be greater than 180° .

Q9: Directions: The following pie chart shows distribution of land (in a village) under various food crops. Study the pie chart and answer the questions that follow. [Level 2, Capegemini, Wipro]



ALL VALUES GIVEN IN DEGREE

If the total are under jowar was 1.5 million acres then what was the area(in million acres)under rice?

- a)6 b)7.5 c)9 d)4.5

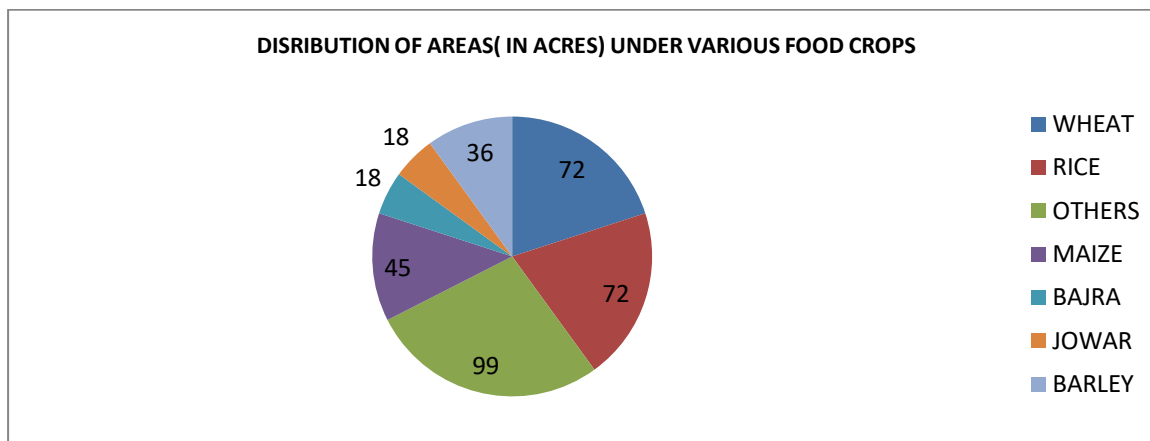
Ans: A

Solution:

Put $18^\circ = 1.5$ million

Rice = $72^\circ = 1.5 \times 4 = 6$

Q10: Directions: The following pie chart shows distribution of land (in a village) under various food crops. Study the pie chart and answer the questions that follow. [Level 2, Capegemini, Wipro]



ALL VALUES GIVEN IN DEGREE

If the production of wheat is 6 times that of barley, then what is the ratio between the yield per acre of wheat and barley?

- a) 3:2 b) 3:1 c) 12:1 d) 2:3

Ans: B

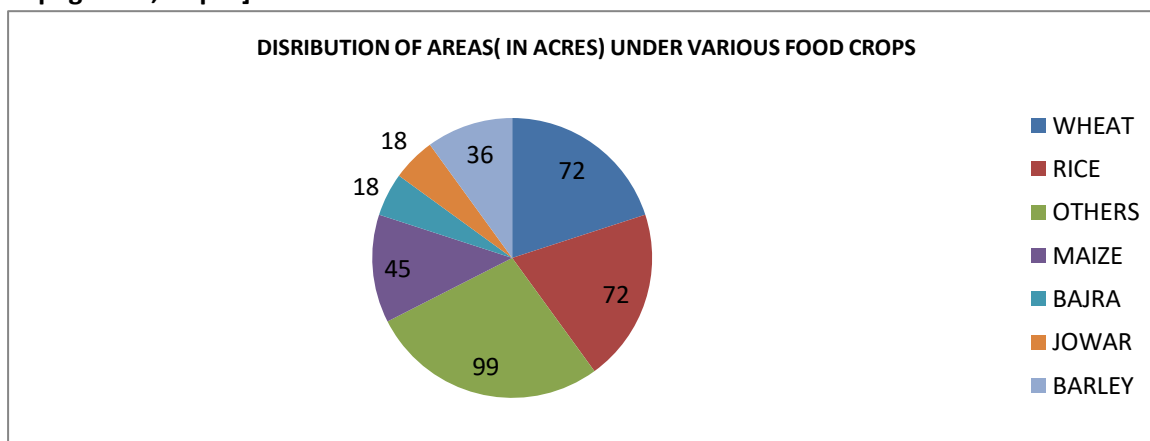
Solution:

Formula Used: Yield per acre = Production/Area

Calculation:

Yield per acre of wheat / Yield per acre of barley = (Production of wheat/ Production of barley) x (Area of barley/ Production of wheat)
 = (6/1) x (1/2) = 3: 1.

Q11: Directions: The following pie chart shows distribution of land (in a village) under various food crops. Study the pie chart and answer the questions that follow. [Level 2, Capegemini, Wipro]



ALL VALUES GIVEN IN DEGREE

If the yield per acre of rice was 50% more than that of barley, then the production of barley is what percent of that of rice?

- a)30% b)33.33% c)35% d)36%

Ans: B

Solution:

Let total area be A million acres.

$$\text{Area under rice} = \frac{72^\circ}{360^\circ} \times A = \frac{A}{5}$$

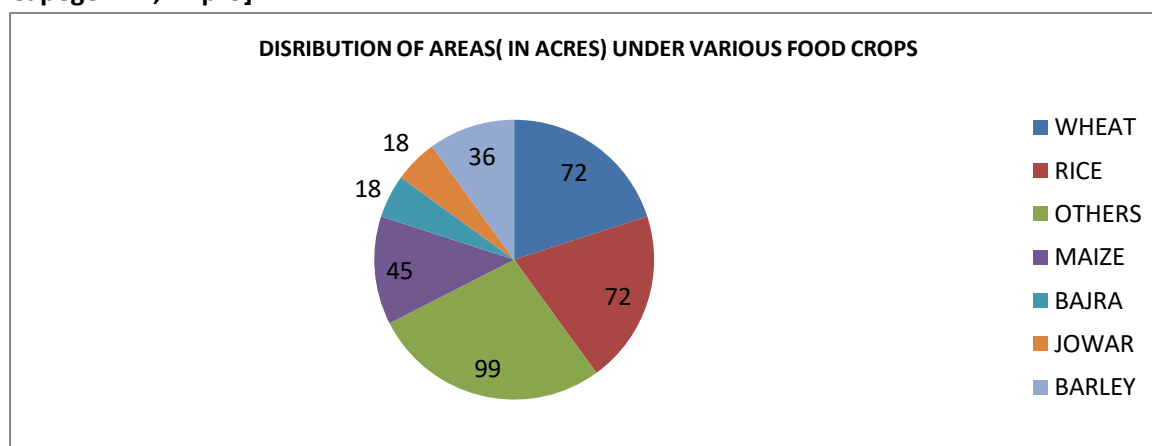
$$\text{Area under barley} = \frac{36^\circ}{360^\circ} \times A = \frac{A}{10}$$

According to the question the yields of barley and rice per acre are k and 1.5k tons respectively.

Required percentage

$$= \left[\frac{\frac{A}{10} \times x}{\frac{A}{5} \times 1.5x} \right] \times 100 = \frac{100}{3} \% = 33.3\%.$$

Q12: Directions: The following pie chart shows distribution of land (in a village) under various food crops. Study the pie chart and answer the questions that follow. [Level 2, Capegemini, Wipro]



ALL VALUES GIVEN IN DEGREE

If the total area goes up by 5%, and the area under wheat production goes up by 12%, then what will be the angle for wheat in the new pie chart?

- a)62.4° b)76.8° c)80.6° d)84.2°

Ans: B

Solution:

Central angle corresponding to wheat in the new pie-chart

$$= \frac{\text{Area under wheat (new)}}{\text{Total area (new)}} \times 360^\circ$$

Q13. 70 litres of a mixture of milk and water contains 20% water. How much water should be added so that the mixture has 28% water? [Level 2, Accenture]

- A. 50/9 litre B. 60/9 litre C. 70/9 litre D. 100/9 litre

Ans: C

Solution: Quantity of milk remains constant

$$72\% \text{ of } (x + 70) = 80\% \text{ of } 70$$

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Q14. The sum of the squares of three numbers is 175, what will be the sum of squares of the twice of the numbers? [Level 1, Accenture]

- A. 175 B. 350 C. 700 D. None of these

Ans: C

Solution:

$$A^2 + B^2 + C^2 = 175$$

$$(2A)^2 + (2B)^2 + (2C)^2 = 4(A^2 + B^2 + C^2) = 600$$

Q15. Bucket P has thrice the capacity as bucket Q. It takes 60 turns for bucket P to fill the empty drum. How many turns it will take for both the buckets P and Q, having each turn together to fill the empty drum? [Level 2, Accenture]

- A. 30 B. 40 C. 45 D. 90

Ans: C

Solution:

$$P = 3 \text{ litre}$$

$$Q = 1 \text{ litre}$$

$$\text{Volume of drum} = 60 \times 3 = 180$$

$$\text{Required time} = 180 / (3+1) = 45$$