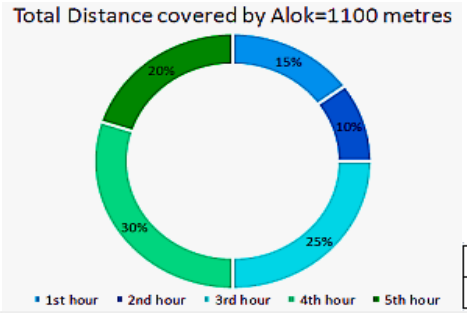
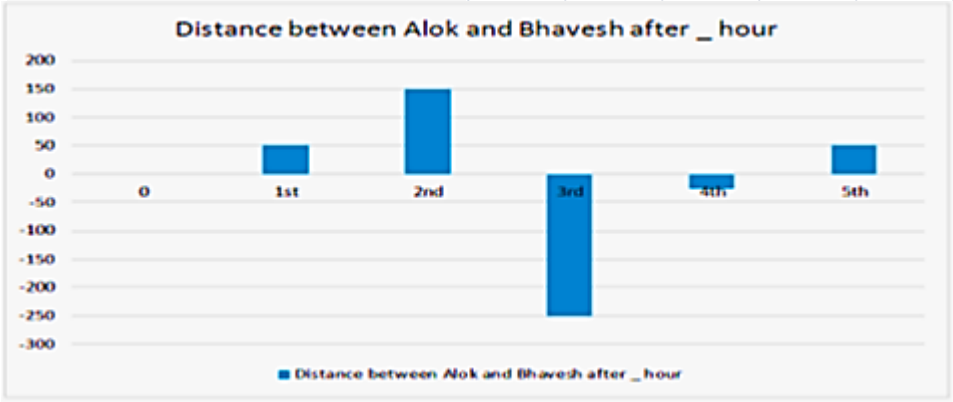
DI Test 3

SET 1: Alok and Bhavesh ran a race of 1100 meters. The donut graph shows the distance covered by Alok in each hour as a percentage of total distance covered by him. The Bar graph shows the relative distance between Alok and Bhavesh after each hour with respect to Alok.(e.g. after 1st hour Alok is ahead of Bhavesh, after 3rd our Bhavesh is ahead of Alok).



1st hour	2nd hour	3rd hour	4th hour	5th hour
15%	10%	25%	30%	20%



1. What was Bhavesh's average maximum speed in any hour?
(A) 540 m/hr (B) 625 m/hr (C) 675 m/hr (D) 750 m/hr (E) None of these

2. What is the ratio of total distance travelled by Alok and Bhavesh after 2 hours?
(A) 9 : 3 (B) 11 : 5 (C) 15 : 7 (D) 17 : 9 (E) None of these

3. How much time was taken by Bhavesh to complete the race?
(A) 5.4 hours (B) 6.4 hours (C) 7.2 hours (D) can't be determined (E) None of these

4. What would be the average speed of Bhavesh in the fifth hour to finish the race with Alok?
(A) 175m/hr (B) 185 m/hr (C) 195 m/hr (D) 205 m/hr (E) None of these

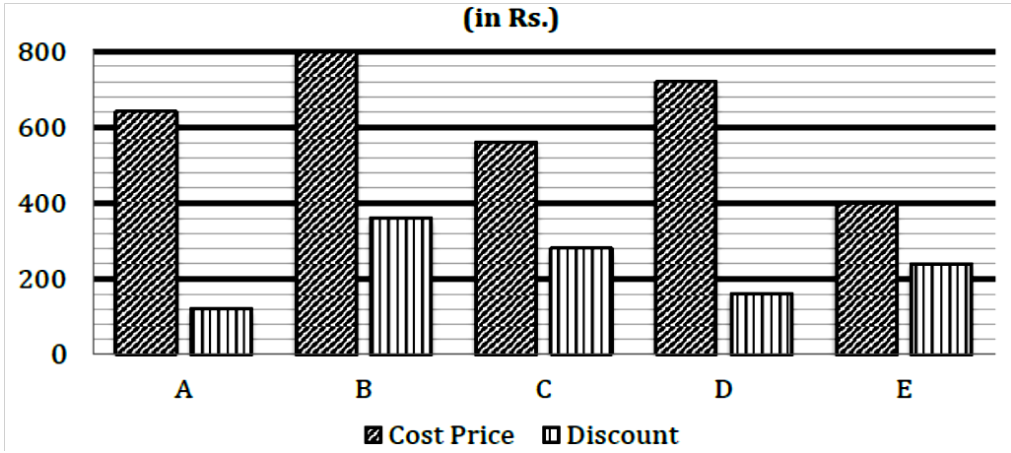
5. What is the difference between the average distance coved by Alok in first four hours and the average distance covered by Bhavesh in all five hours?
(A) 10 m (B) 15 m (C) 20 m (D) 25 m (E) None of these

SET 2. Read the following information carefully and answer the questions based on it.
P and Q started from point A, at same time and running towards point D. Point A, B, C and D are collinear (same order). Time taken by P to travel distance from B to C is 6 hours more than that of Q, while time taken by P to travel from A to B and from C to D respectively is 8 hours and 14 hours less than that of Q. Distance between A and B is twice as that of distance between C and D, while distance between B and C is thrice of distance between C and D. Average speed of P for overall journey is 90 km/h while of Q is 60 km/h.

6. Find total distance between point A and point D.
1.2400 km 2.1920 km 3.1440 km 4.2880 km 5.None of these

7. if speed of P for covering BC is 100% more than that while covering CD, and time taken to travel CD is 4 hours less than that of BC. Find the speed of P while travelling from BC?
1.100 km/h 2.60 km/h 3.120 km/h 4.108 km/h 5.None of these

SET 3: Study the bar chart given below and answer the following questions. Bar chart shows the cost price of 5 different articles (A, B, C, D & E) and amount of discount allowed on these 5 articles.



8. Selling price of A is Rs.260 more than that of C and selling price of C is 50% more than discount allowed on C. Find marked price of A & C together is what percent of cost price of B & E together.
(a) 75% (b) 125% (c) 175% (d) 100% (e) 150%

9. D is marked 33 1/3% above its cost price and amount of profit on B is 27.5% of marked price of B. If cost price of article – F is equal to selling price of article – B and selling price of article – F is 60% more than selling price of article – D, then find profit earned on article – F.
(a) Rs.150 (b) Rs.110 (c) Rs.70 (d) Rs.90 (e) Rs.40

10. Ratio of marked price of E to profit earned on E is 25 : 9 and marked price of C is equal to cost price of B. Find selling price of C & E together are how much more or less than cost price of A & B together?
(a) Rs.200 (b) Rs.120 (c) Rs.40 (d) Rs.160 (e) Rs.80

11. Marked price of A & B together is Rs.2000 and ratio of selling price of A to that of B is 17 : 21. Find amount of profit/loss earned by a person, if he sold 12 units of article – A and 17 units of article – B.
(a) Rs.1160 (b) Rs.1540 (c) Rs.1820 (d) Rs.820 (e) Rs.640

12. Profit earned on B is equal to that earned on E and selling price of B is equal to marked price of D. If selling price of D is 84% of its marked price, then find marked price of B & E together.
(a) Rs.2340 (b) Rs.2280 (c) Rs.2200 (d) Rs.2480 (e) Rs.2400

SET 4. Read the following information carefully and answer the questions based on it.
A milkman has three vessels – P, Q, and R contains mixture of milk and water. Vessel P and vessel Q contains L/3 ml and (L/6) + 5 ml mixture of milk and water, in which milk in thrice and four times as that of water respectively. Container S have pure milk of L liters. 60 ml from S removed and replaced by water and then 120 ml is removed and replaced by water, so milk in container S becomes 60% of water. Milk man start doing experiment, so he poured some amount of mixture from vessel R tovessel Q and rest poured into vessel P, such that milk in vessel Q becomes twice as that of water.In Vessel R (milk is less than water) contains L/4 ml of mixture in which ratio of milk and water is (M + 1): (N – 4). Amount of milk added from vessel R to vessel Q is a multiple of 4, and milk and water in vessel P after addition from vessel R is natural numbers.

13. Find the difference between amount of milk and water in vessel P, after addition from vessel R.
1.17 ml 2.21 ml 3.19 ml 4.23 ml 5.Can't be determined

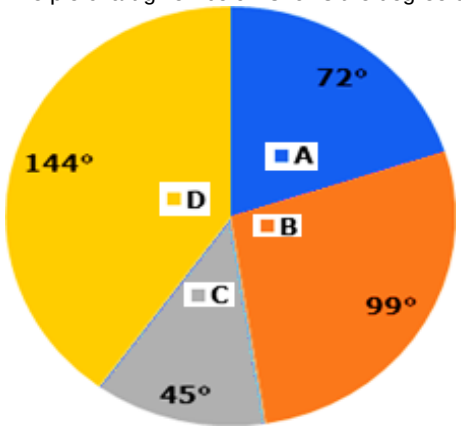
14. If milkman has L/2 liters ml of pure milk. He sold 20 ml to first customer and then added same amount of water, and then sold 20 ml to second customer and added same amount of water, and so on. Find the approximate amount of pure milk given to third customer.
1.70 ml 2.14 ml 3.69 ml 4.13 ml 5.15 ml

15. Milk man sold the amount of mixture in vessel Q (Final) at cost price of pure milk, to a customer which is not aware about the mixing of water in it, thus earning actual profit of 33.33%, then the ratio cost price of 1 ml of milk to that of water?
1.5:2 2.3:1 3.2:1 4.4:1 5.None of these

16. A vessel contains mixture of milk and water in ratio of N: M is mixed with vessel Q (initial) in ratio of 3:2 respectively, then find the percentage of water in mixture?
1.20% 2.25% 3.10% 4.15% 5.None of these

17. Find ratio of water to milk in vessel R respectively.
1.4:11 2.11:4 3.5:1 4.1:5 5.None of these

SET 5: Study the following data carefully and answer the questions:
There are four tanks (A, B, C and D) of different capacities. Each tank has a circular cross section (circular whole) in the bottom and the areas (in cm^2) of circular cross sections of each tank are different.
The pie chart given below shows the degree distribution of area of the circular whole of each tank.



Note: 1). Flowing speed (in cm/s) of water from circular whole of a tank is 10% of the volume (in L) of the tank and all the tanks are fully filled with water.
2). Flowing speed of water from the circular whole of tank A is 15 cm/s and the volume of water flowing from tank A in 1 second is 240 cm^3. (1 cm^3 = 0.001 L)

18. If the flowing speed of water from tank B is 66 2/3% of that of the flowing speed of water from tank A, then find the ratio of volume of water left in tank A after 5 minutes to the volume of water left in tank B after 5 minutes?
1.39: 17 2.39: 40 3.26: 27 4.6: 7 5.2: 3

19. If the volume of water flowed from tanks C and D in 1 second is respectively 10 cm^3 and 400 cm^3 more than the volume of water flowed from tank A in 1 second, then find the average of flowing speed of water from tank C and that from tank D?
1.20.5 cm/s 2.24.5 cm/s 3.21.5 cm/s 4.23.5 cm/s 5.22.5 cm/s

20. If the volume of water flowed from tank B in 1 second is 330 cm^3 and the volume of water flowed from tank C in 1 second is 200 cm^3, then find that difference between the volume of tank B and that of tank C?
1.40 L 2.75 L 3.50 L 4.80 L 5.60 L

21. If the volume of water flowed from tank D in 1 second is 640 cm^3, the volume of tank E is 50 L more than that of tank D and the volume of water flowed from tank E in 1 second is 600 cm^3, then find the ratio of the area of circular whole of tank D to that of tank E?
1.2: 1 2.4: 3 3.2: 3 4.8: 7 5.4: 5

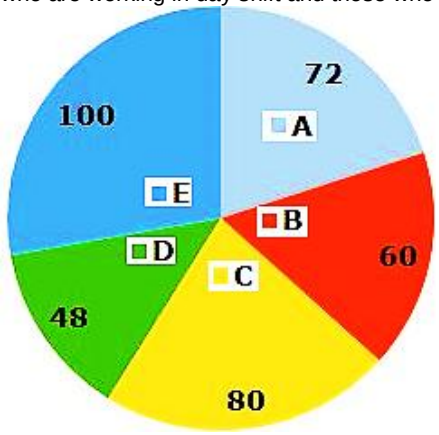
SET 6. Study the given information carefully and answer the given questions.
Three friends – P, Q, and R have invested different sums in four businesses – A, B, C, and D.
The sum invested by R in business D is Rs.'b'. Sum invested by Q in business D is 75% of the sum invested by R in business D which is 1/9th less than the sum invested by P in business D. Sum invested by Q in business C is Rs.'a'. Sum invested by P in business B is 20% more than the sum invested by Q in business C. The ratio of the sum invested by Pin Business B to the sum invested by R in Business A is 6 : 7. The Sum invested by P in Business A is 1/3rd more than the sum invested by R in Business D. The ratio of the sum invested by P, Q, and R in business A is 8 : 6 : 7 respectively. R invested 50% more sum in business C than Q invested in business C. The ratio of the sum invested by P and the sum invested by R in business C is 5 : 6 respectively. R invested 33.33% less sum in business B than he invested in business C. Q invested Rs.6000 more in business B than R invested in business B. P, Q, and R together invested Rs.75000 in business C.

22. In business C, R withdraws his sum after 8 months from the start of business. At the end of 1 year, the total profit is Rs.5681. Find the profit share of Q.
1.1576 2.1748 3.1864 4.1654 5.None of these

23. In business A, Q increases his investment by 25% after 6 months from the start of the business and after 3 more months, P withdraws his investment. At the end of 1 year, P got Rs.2472 as his profit share. Find the total profit at the end of 1 year.
1.6472 2.6792 3.7537 4.8137 5.None of these

24. In business D, 25% of the total profit is donated to charity and the rest of the profit is distributed among P, Q, and R as per their investment. P received Rs.3348 as his profit share. Find the total profit at the end of 1 year.
1.11408 2.9454 3.12658 4.10852 5.None of these

SET 7. Study the following data carefully and answer the questions:
There are five different companies A, B, C, D and E. In each company, different numbers of workers are working in two shifts i,e; day shift and night shift.
Note:
1: In each company, the number of workers working in day shift is more than that working in night shift.
2: In company A, the number of workers working in the night shift is 62.5% of those working in the day shift.
The Pie chart given below shows the degree distribution of the difference between the number of workers, who are working in day shift and those who are working in night shift in each company.



Average number of workers, working in day shift in companies A, D and E is 50 and the ratio of number of workers, working in day shift in company A to that in company D is 8: 7. Number of workers, working in day shift in company D is 2 more than that in company C and Number of workers, working in day shift in company A is 12 less than that in company E. Ratio of the number of workers, working in day shift in company B to that in company C is 11: 8.

25. In company C, if 40% of total workers are female and all the female workers are working in day shift, then find the difference between the number of male workers, who are working in day shift and those who are working in night shift.
1.5 2.3 3.8 4.4 5.6

26. Which of the following is/are true?
A: Ratio of the total number of workers, working in company D to the total number of workers, working in the day shift in companies A and E together is 3: 2. **B:** Total number of workers working in the night shift in companies C and D together, is 60. **C:** In company E, the number of workers working in the night shift is 60% of those who are working in day shift. 1.Only B and C are true 2.All A, B and C are true 3.Only A is true 4.Only A and C are true 5.None is true

27. What is the ratio of the total number of workers, working in company B to those who are working in company E?
1.2: 3 2.6: 5 3.1: 2 4.4: 3 5.1: 1

28. In company A, if 40% of workers, working in night shift, are female workers and 62.5% of workers, working in day shift, are female workers, then find the average number of male workers, working in day shift and those who are working in night shift?
1.20 2.18 3.24 4.16 5.22

29. Total number of workers, working in the night shift in companies A and D together is what percent less than that of those who are working in day shifts in the same companies together?
1.33.33% 2.25% 3.40% 4.32.5% 5.26.67%

(1 - 5)
Distance covered by Alok in 1st hour = 1100 × 0.15 = 165 m
Distance covered by Bhavesh in 1st hour = 165 - 50 = 115 m
Distance covered by Alok in 2nd hour = 1100 × 0.1 = 110 m
Distance covered by Bhavesh in 2nd hours = (1100 × 0.25 - 150) - 115 = 10 m
Similarly solve for upcoming hours.

Hour	Distance covered by__ hour		Distance covered in __ hour	
	By Alok	By Bhavesh	By Alok	By Bhavesh
1st	165	115	165	115
2nd	275	125	110	10
3rd	550	800	275	675
4th	880	905	330	105
5th	1100	1050	220	145

1. Ans. (C)
Maximum average speed of Bhavesh = 675 m/hr
2. Ans. (B)
Ratio = 275 : 125 = 11 : 5
3. Ans. (D)
For last (1100 - 1050=) 50 m, Speed of Bhavesh is not known, Hence time taken by Bhavesh to complete the race Cannot be determined
4. Ans. (C)
To complete the race Speed in 5th hours, Speed of Bhavesh should be = 1100- 905 = 195m/hr
5. Ans. (A)
Difference = 880/4 - 1050/5 = 220 - 210 = 10 m
{6 – 7}
Solution
Ratio of speed of P to Q = 90:60 = 3:2
Ratio of time taken = 2:3
Difference between travelling time of P and Q = 8 + 14 – 6 = 16 hours
So, travelling time of P = [2 / (3 – 2)] x 16 = 32 hours
Travelling time of Q = 32/2 x 3 = 48 hours
Distance between A and D = 32 x 90 = 2880 km
Ratio of distance between, AB, BC, and CD respectively = 2:3:1
Distance between AB = 2/6 x 2880 = 960 km
Distance between BC = 3/6 x 2880 = 1440 km
Distance between CD = 1/6 x 2880 = 480 km
6. Answer: D
According to question,
Required distance = 2880 km
Hence answer is option D
7. Answer: C
Ratio of speed of P while covering BC and CD = 2:1
Ratio of distance between BC and CD = 3:1
Ratio of time taken = 3/2: 1/1 = 3:2
Time taken by P to cover BC = 3/ (3 – 2) x 4 = 12 hours
Required speed = 1440/12 = 120 km/h
Hence answer is option C
{8 – 12}
8

(b): Selling price of C $= \frac{150}{100} \times 280$
$= Rs.420$
Now, selling price of A $= 260 + 420$
$= Rs.680$
Marked price of A $= 680 + 120$
$= Rs.800$
And, marked price of C $= 420 + 280$
$= Rs.700$
Required % $= \frac{800+700}{800+400} \times 100$
$= 125\%$

9

(e): Selling price of article – D $= \left(720 \times \frac{400}{300}\right) - 160$
$= Rs.800$
Selling price of article – F $= \frac{160}{100} \times 800$
$= Rs.1280$
Let marked price of article – B be Rs.y
So, amount of profit on article – B $= (y - 360) - 800$
$= Rs.(y - 1160)$
ATQ,
$\frac{y-1160}{y} = \frac{27.5}{100}$
$y = 1600$
Now, cost price of article – F $= (1600 - 360)$
$= Rs.1240$
Required amount $= 1280 - 1240$
$= Rs.40$

10

(d): Let marked price of E & profit earned on E be Rs.25a & Rs.9a respectively.
Now, $(25a - 240) = (400 + 9a)$
$a = 40$
So, selling price of E $= 25 \times 40 - 240$
$= Rs.760$
Selling price of C $= (800 - 280)$
$= Rs.520$
Cost price of A & B together $= 640 + 800$
$= Rs.1440$
Required difference $= 1440 - (760 + 520)$
$= Rs.160$

11

(a): Let the Selling Price of A & B be 17x and 21x respectively
Marked Price of A & B be 17x+120 and 21x+360 respectively
17x+120+21x+360=2000
38x+480=2000
x=40
Hence, Selling Price of A=17×40=680
And, Selling Price of B= 21×40=840
Required amount = $((680 - 640) \times 12) + ((840 - 800) \times 17)$
= Rs.1160

12

(c): Let marked price of D be Rs.100y
So, selling price of D = $\frac{84}{100} \times 100y$
= Rs.84y
ATQ,
84y + 160 = 100y
y = 10
Hence, marked price of D = 100y
= Rs.1000
Selling Price of B=1000 Rs
Now, marked price of B = 1000 + 360
= Rs.1360
And, marked price of E = 400 + (1000 – 800) + 240
= Rs.840
Required amount = 1360 + 840 = Rs.2200

{13 – 17}

Solution

First, we need to calculate the value of L.
In container S, after certain removal and replacements the ratio of milk and water in the final mixture becomes 3:5.
L x (1 – 60/L) x (1 – 120/L) = 3/8 x L
L^2 – 120L – 60L + 7200 = (3/8) L^2
$8L^2$ –1440L + 57600 = $3L^2$
$5L^2$ –1440L + 57600 = 0 (Divided by 5)
We get,
L^2 – 288L + 11520 = 0
(L – 240) (L – 48) = 0
L = 240, 48
So, value of L = 240 ml
Amount of mixture in vessel P Initially = 240/3 = 80 ml
Ratio of milk and water initially in mixture P = 3:1
Amount of milk in vessel P = 3/4 x 80 = 60 ml
Amount of water in vessel P = 80 – 60 = 20 ml
Amount of mixture in vessel Q initially = (240/6) + 5 = 45 ml
Ratio of milk and water initially in mixture Q = 4:1
Amount of milk in vessel Q = 4/5 x 45 = 36 ml
Amount of water in vessel Q = 45 – 36 = 9 ml
Amount of milk added to Q from R is a multiple of 4.
If amount of milk added = 4ml
Then amount of water added = (36 + 4)/2 – 9 = 11 ml
So, amount of mixture added to P = 60 – 15 = 45 ml
This value is possible.
If amount of milk added = 8 ml
Amount of water added = (36 + 8)/2 – 9 = 13 ml
So, amount of mixture added to P = 60 – 13 – 8 = 39 ml
This is not possible, because ratio of milk and water in R is 8:13, so 39 ml when divided on this ratio, it becomes non – integer value.
If amount of milk added = 12 ml
So, amount of water added = (36 + 12)/2 – 9 = 15 ml
Ratio of milk and water in R = 12:15 = 4:5
Amount of mixture added to P = 60 – 12 – 15 = 33 ml (not possible)
If amount of milk added = 16 ml
Then, amount of water added = (36 + 16)/2 – 9 = 17 ml
Amount of mixture added to P = 60 – 16 – 17 = 27 ml
Similarly, this value is also not possible,
If amount of milk added = 20 ml
Then, amount of water added = 19 ml (not possible because milk in vessel R is less than that of water).
So, ratio of milk and water in vessel R = 4:11
M+1 =4
M = 3
N-4 = 11
N = 15

13. Answer: C

According to question,
Amount of mixture from vessel R added to P = 60 – 4 – 11 = 45 ml
So, amount of milk in vessel P = 60 + 4/15 x 45 = 72 ml
Amount of water in vessel P = 20 + 11/15 x 45 = 53 ml
Required difference = 72 – 53 = 19 ml
Hence answer is option C

14. Answer: B

Initial amount of pure milk with milk man = 240/2 = 120 ml
Amount of pure milk given to third customer = 120 x (1 – 20/120) x (1 – 20/120) x 20/120 = 120 x 5/6 x 5/6 x 1/6 = 14 ml
Hence answer is option B

15. Answer: D

Let the cost price of pure milk and water per ml = Rs. a and Rs. b per ml.
Now,
(40 x a + 20 x b) x 4/3 = (40 + 20) x a
40a + 20b = 45a
5a = 20b
So, a/b = 20/5 = 4/1
Hence answer is option D

16. Answer: E

Value of N = 15
Value of M = 3

Ratio of milk and water in the vessel = 15:3 = 5:1
Ratio of milk and water in vessel Q = 4:1
Fraction of milk in final mixture = (5/6 x 3 + 4/5 x 2)/ (3 + 2) = 41/50
So, ratio of milk and water = 41:9
Required percentage = (9/50) x 100 = 18%
Hence answer is option E

17. Answer: B

Required ratio = 11:4
Hence answer is option B

{18 – 21}

Solution

Since, the flowing speed of water from tank A = 15 cm/s
And the volume of water flowed from tank A in 1 second = 240 cm^3
So, the area of circular whole of tank A = 240/15 = 16 cm^2
The area of circular whole of tank B = 16 × 99/72 = 22 cm^2
The area of circular whole of tank C = 16 × 45/72 = 10 cm^2
The area of circular whole of tank D = 16 × 144/72 = 32 cm^2

18. Answer: A

Since, the flowing speed of water from tank A = 15 cm/s
So, the flowing speed of water from tank B = 66 2/3% of 15 = 10 cm/s
The volume of water flowed from tank A in 1 second = 240 cm^3 = 0.24 L = 240 ml
The volume of water flowed from tank B in 1 second = 22 * 10 = 220 cm^3 = 0.22 L = 220 ml
The volume of water in tank A = 15 × 100/10 = 150 L
The volume of water in tank B = 10 × 100/10 = 100 L
The volume of water left in tank A after 5 minutes:
150- (5 ×60 ×240)/1000=78 L
The volume of water left in tank B after 5 minutes:
100- (5 ×60 ×220)/1000=34 L
Required ratio = 78: 34 = 39: 17

19. Answer: E

Since, the volume of water flowed from tank A in 1 second = 240 cm^3
So, the volume of water flowed from tank C in 1 second = 240 + 10 = 250 cm^3
And the volume of water flowed from tank D in 1 second = 240 + 400 = 640 cm^3
Since, the area of circular whole of tank C = 10 cm^2
So, the flowing speed of water from tank C = 250/10 = 25 cm/s
Since, the area of circular whole of tank D = 32 cm^2
So, the flowing speed of water from tank D = 640/32 = 20 cm/s
Required average = (25+20)/2 = 22.5 cm/s

20. Answer: C

If the volume of water flowed from tank B in 1 second = 330 cm^3
So, the flowing speed of water from tank B = 330/22 = 15 cm/s
And the volume of tank B = 15 × 100/10 = 150 L
If the volume of water flowed from tank C in 1 second = 200 cm^3
So, the flowing speed of water from tank C = 200/10 = 20 cm/s
And the volume of tank C = 20 × 100/10 = 200 L
Required difference = 200 – 150 = 50 L

21. Answer: B

Since, the volume of water flowed from tank D in 1 second = 640 cm^3
So, the flowing speed of water from tank D = 640/32 = 20 cm/s
The volume of tank D = 20 × 100/10 = 200 L
The volume of tank E = 200 + 50 = 250 L
And the flowing speed of water from tank E = 10% of 250 = 25 cm/s
Since, the volume of water flowed from tank E in 1 second = 600 cm^3
So, the area of circular whole of tank E = 600/25 = 24 cm^2
Required ratio = 32: 24 = 4: 3

{22 – 24}

Solution

The sum invested by R in business D = b
The sum invested by Q in business D = 3b/4
The sum invested by P in business D = 9b/8
The sum invested by Q in business C = a
The sum invested by P in business B = 6a/5
The sum invested by R in business A = 7a/5
The sum invested by P in business A = 4b/3
The sum invested by P in business A = 8a/5
Then, 4b/3 = 8a/5
a/b = 5/6
The sum invested by Q in business A = 6a/5
The sum invested by R in business C = 3a/2
The sum invested by P in business C = 5a/4
The sum invested by R in business B = a
The sum invested by Q in business B = a + 6000
According to the question,
5a/4 + a + 3a/2 = 75000
a = 20000
b = 20000 * (6/5) = 24000

Business	The sum invested by P	The sum invested by Q	The sum invested by R
A	32000	24000	28000
B	24000	26000	20000
C	25000	20000	30000
D	27000	18000	24000

22. Answer: B

The ratio of investment P, Q, and R in business C = 25000 * 12 : 20000 * 12 : 30000 * 8 = 5 : 4 : 4
Profit share of Q = 5681 * (4/13) = 1748

23. Answer: D

The ratio of investment P, Q, and R in business A = 32000 * 9 : 24000 * 6 + 30000 * 6 : 28000 * 12
= 24 : 27 : 28
Total profit at the end of 1 year = 2472 * (79/24) = 8137

24. Answer: A

The ratio of investment of P, Q, and R in business D = 27000 * 12 : 18000 * 12 : 24000 * 12 = 9 : 6 : 8
Profit received by P, Q, and R in business D after charity = 3348 * (23/9) = 8556

Total profit occur in business D after 1 year = 8556 * (4/3) = 11408

{25 – 29}

Solution

Let the number of workers working a day shift in companies A, B, C, D and E are ‘a’, ‘b’, ‘c’, ‘d’ and ‘e’ respectively.

So, a + d + e = 3* 50

a + d + e = 150 ---------- (1)

Since, a/d = 8/7

d = 7a/8 ---------- (2)

And a = e – 12

e = a + 12 ---------- (3)

From equations (1), (2) and (3):

a + (7a/8) + a + 12 = 150

a = 48, d = 42, e = 60

Since, d = c + 2

So, c = 40

Since, b/c = 11/8

So, b = 55

Number of workers, working in day shift in company A = 48

So, number of workers, working in night shift in company A = 62.5% of 48 = 30

Difference between number of workers, working in day shift and night shift in company A = 48 – 30 = 18

Companies	Number of workers, working in day shift	Difference between number of workers, working in day shift and night shift	Number of workers, working in night shift
A	48	18	48 – 18 = 30
B	55	18 * (60°/72°) = 15	55 – 15 = 40
C	40	18 * (80°/72°) = 20	40 – 20 = 20
D	42	18 * (48°/72°) = 12	42 – 12 = 30
E	60	18 * (100°/72°)= 25	60 – 25 = 35

25. Answer: D

Number of workers, working in day shift in company C = 40

Number of workers, working in night shift in company C = 20

Total number of workers, working in company C = 40 + 20 = 60

Number of female workers, working in company C = 40% of 60 = 24

Since all the female workers are working in day shifts.

So, the number of male workers, working in day shift = 40 – 24 = 16

Required difference = 20 – 16 = 4

26. Answer: E

From A:

Total number of workers, working in company D = 42 + 30 = 72

Total number of workers, working in day shift in companies A and E together = 48 + 60 = 108

Required ratio = 72: 108 = 2: 3

So, A is not true.

From B:

Number of workers, working in night shift in company C = 20

Number of workers, working in night shift in company D = 30

Required sum = 20 + 30 = 50

So, B is not true.

From C:

Number of workers, working in day shift in company E = 60

Number of workers, working in night shift in company E = 35

Required percentage = (35/60) * 100 = 58.33%

So, C is not true.

Hence, none of the A, B and C is true.

27. Answer: E

Total number of workers, working in company B = 55 + 40 = 95

Total number of workers, working in company E = 60 + 35 = 95

Required ratio = 95: 95 = 1: 1

28. Answer: B

In company A:

Number of workers, working in day shift = 48

So, number of male workers, working in day shift = 37.5% of 48 = 18

Number of workers, working in night shift = 30

So, number of male workers, working in night shift = 60% of 30 = 18

Required average = (18 + 18)/2 = 18

29. Answer: A

Total number of workers, working in day shift in companies A and D together: 48 + 42 = 90

Total number of workers, working in night shift in companies A and D together: 30 + 30 = 60

Required percentage = [(90 – 60)/90] * 100 = 33.33%