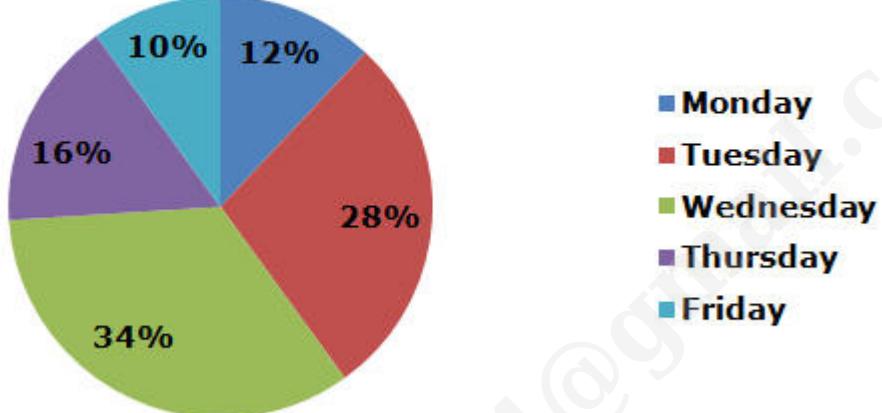


1. Questions

Study the following information carefully and answer the questions.

The given pie chart shows the percentage distribution of the total number of blankets and shawls sold on five different days namely Monday, Tuesday, Wednesday, Thursday and Friday respectively. The difference between the total number of blankets and shawls sold on Monday and Friday is 240.

Percentage distribution of the total number of blankets and shawl sold



On Wednesday, the ratio of the number of blankets to shawls sold is 3:5. The number of curtains sold is 20% more than that of shawls on Wednesday. If the number of curtains unsold is $4/15^{\text{th}}$ of the number of curtains sold on Wednesday, then find the number of curtains unsold on Wednesday.

- a. 810
- b. 816
- c. 820
- d. 824
- e. 830

2. Questions

The total number of blankets and shawls sold on Saturday is $1/8^{\text{th}}$ more than that on Monday. If out of the total number of blankets and shawls sold on Saturday, 45% of the sold are blankets, then find the number of shawls sold on Saturday.

- a. 891
- b. 925
- c. 890

d. 760

e. 699

3. Questions

The difference between the total number of blankets and shawls sold on Thursday and Friday is P. If the number of blankets sold on Thursday and Friday is $(P + 200)$ and $24Q$ respectively, and the value of Q is 25. Find difference between the number of shawls sold on Friday and Thursday.

a. 900

b. 400

c. 510

d. 720

e. 670

4. Questions

The total number of blankets and shawls unsold on all the days together is 80% of the total number of blankets and shawls sold on all the days together. Find the total number of blankets and shawls unsold on all the days together.

a. 8800

b. 7000

c. 9800

d. 7800

e. 9600

5. Questions

On Friday, the number of blankets sold is 40% more than that of shawl. Find the number of blankets sold on Friday.

a. 800

b. 700

c. 500

d. 870

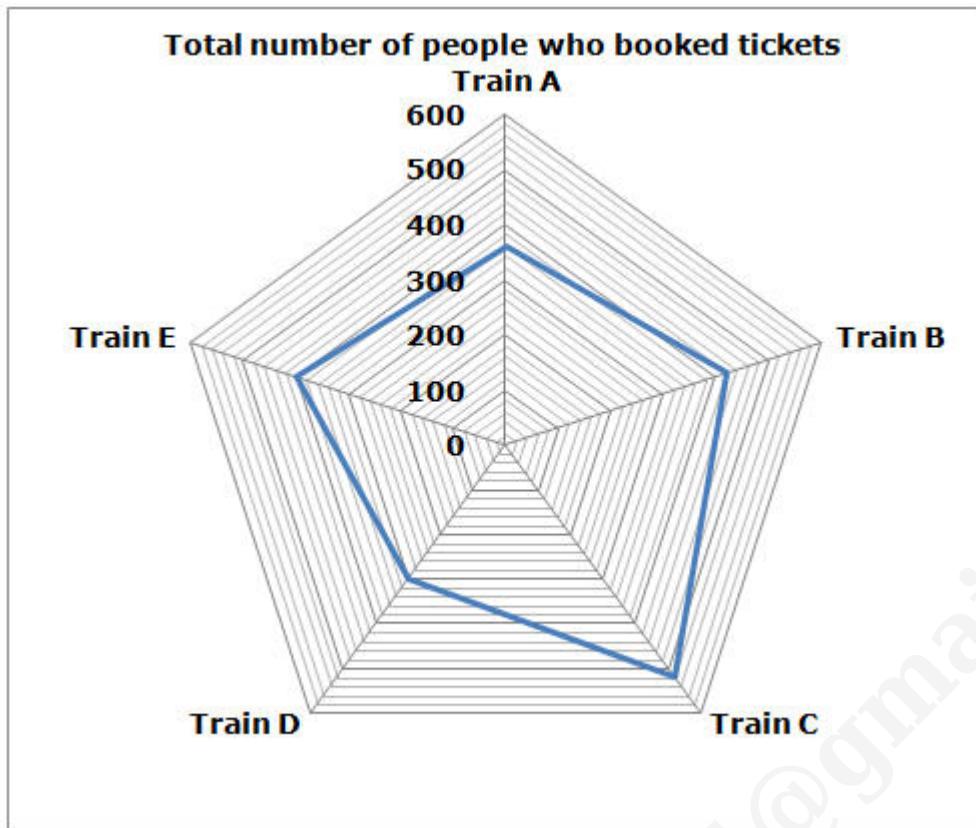
e. 670

6. Questions

Study the following information carefully and answer the questions.

The given radar graph shows the total number of people who booked tickets for five different trains

namely A, B, C, D and E respectively.



In train B, 30% of the tickets are booked by males, and the rest are booked by females. The number of males who booked tickets for train C is 24 more than that on train B. Find the number of females who booked tickets for trains B and C.

- a. 664
- b. 560
- c. 920
- d. 450
- e. 670

7. Questions

In train A, 20% and $1/6^{\text{th}}$ of the people who booked tickets are from Mumbai and Delhi, and the remaining people are from Bangalore. Find the difference between the number of people who booked tickets from Bangalore and the number of people who booked tickets from Delhi, and Mumbai together for Train A.

- a. 120
- b. 96
- c. 124
- d. 88

e. 99

8. Questions

Find the total number of people who booked tickets for train A, C and E.

- a. 1190
- b. 1280
- c. 980
- d. 1100
- e. 870

9. Questions

The ratio between the number of people who booked tickets for train B to D is a:b. If the number of total people who booked tickets for train F is $(15a + 12b)$ and the number of males who booked tickets for train F is 30% of the total number of people who booked tickets for train E, then find the number of people other than males who booked tickets for train F.

- a. 30
- b. 36
- c. 57
- d. 75
- e. 45

10. Questions

In train A, the ratio of the number of people who booked tickets through online to offline is 5:7. Find the number of people who booked tickets through online for Train A.

- a. 180
- b. 150
- c. 210
- d. 200
- e. 170

11. Questions

Study the following information carefully and answer the questions.

A certain number of notes and books in three different shelf namely P, Q and R respectively. The number of books in shelf R is 25 which is 5 more than that of shelf P. The ratio of number of books to notes in shelf P is 1:4. The number of notes in shelf Q is half that of shelf P. The total number of notes in all the three shelves together is 155. The number of books in shelf Q is thrice that of shelf P.

On shelf Q, the number of pencils is equal to the difference between the number of books and notes. Find the ratio of the number of pencils to notes in shelf Q.

- a. 2:1
- b. 3:4
- c. 1:2
- d. 3:7
- e. 2:5

12. Questions

Find the total number of books in all the three shelves together.

- a. 100
- b. 120
- c. 105
- d. 96
- e. 89

13. Questions

Find the sum of number of notes in shelf R and the number of books in shelf P.

- a. 50
- b. 55
- c. 43
- d. 56
- e. 20

14. Questions

The number of notes in shelf S is 10% more than that of shelf Q, and the number of books in shelf P is 20% less than that of shelf S. Find the total number of books and notes in shelf S.

- a. 69
- b. 79
- c. 67
- d. 120
- e. 70

15. Questions

The number of notes in shelf P is what percentage of the number of books in shelf R.

- a. 300%
- b. 320%
- c. 240%
- d. 180%
- e. 250%

16. Questions

Rajesh and Suresh entered into a partnership by investing Rs. 8000 and Rs. 4000, respectively. After a year, Kavin joined and invested Rs. 12,000. The total profit share at the end of two years is Rs. 10,800. Find the difference between the profit shares of Rajesh and Kavin.

- a. Rs. 1200
- b. Rs. 900
- c. Rs. 1100
- d. Rs. 1400
- e. Rs. 1800

17. Questions

A mixture contains milk and water; the quantity of milk is 40% more than the quantity of water. If 60 litres of mixture is removed and 70 litres of milk is added, then the ratio of the quantity of milk to water becomes 7:3. Find the initial quantity of mixture.

- a. 180 litres
- b. 240 litres
- c. 320 litres
- d. 150 litres
- e. 200 litres

18. Questions

The ratio of A's age after 4 years to B's age before 4 years is 21:19. The average present age of A and B is 40 years. The present age of C is 13 years less than that of A. Find the sum of the present ages of B and C.

- a. 67 years
- b. 55 years
- c. 48 years
- d. 72 years

- e. 80 years

19. Questions

The ratio of the cost price to the marked price of the article is 5:8. The article was sold at 20% discount and made a profit of Rs. 70. Find the difference between the cost price and the marked price.

- a. Rs.180
- b. Rs.190
- c. Rs.150
- d. Rs.140
- e. Rs.110

20. Questions

The difference between the downstream speed and the upstream speed is 4 km/hr. The ratio of the speed of the stream to the speed of the boat in still water is 1:4. Find the total time taken by the boat to cover 210 km in downstream and 216 km in upstream.

- a. 57 hours
- b. 45 hours
- c. 40 hours
- d. 55 hours
- e. 35 hours

21. Questions

A man completed a journey in 8 hours with an average speed of 25 km/hr. He covered the first 20% of the journey in 2 hours and 20% of the remaining journey in another 2 hours. Find the speed of the man at which he covers the remaining distance.

- a. 35 km/hr
- b. 25 km/hr
- c. 32 km/hr
- d. 16 km/hr
- e. 20 km/hr

22. Questions

A alone can complete a work in 20 days, and B can complete 50% of the work in 6 days. A and B worked for x days, and the remaining work was completed by B alone in 4 days. Find the value of x.

- a. 8

- b. 5
- c. 12
- d. 7
- e. 4

23. Questions

Ragu had Rs. 5,000 with him. He invested 20% of the amount in scheme A at 10% p.a. compound interest and he invested the remaining amount in scheme B at 20% p.a. simple interest. Find the difference between the interest obtained in scheme B and scheme A after 2 years.

- a. Rs. 1390
- b. Rs. 1200
- c. Rs. 1800
- d. Rs. 960
- e. Rs. 1100

24. Questions

The ratio of the number of people who bought ice creams to chocolates is 11:15. Out of the total number of people who bought ice creams, 45% are males, and the rest are females. The number of females who bought ice creams is 121. Find the total number of people who bought chocolates.

- a. 250
- b. 300
- c. 280
- d. 190
- e. 420

25. Questions

A box contains x red balls, 6 green balls, and two blue balls, respectively. The probability of finding a red ball is $1/3$. If two balls are picked at random, then find the probability of getting 1 red and 1 green ball in the box.

- a. $4/11$
- b. $9/7$
- c. $1/6$
- d. $4/7$
- e. $7/11$

26. Questions

What approximate value should come in the place of (?) in the following questions.

$$((9.12)^3 * 7.87) / ? = (17.96)^2$$

- a. 15
- b. 18
- c. 22
- d. 25
- e. 11

27. Questions

$$(20.12\% \text{ of } 15.01^2) / ? = 9.92$$

- a. 11.8
- b. 4.5
- c. 15.5
- d. 6.9
- e. 23

28. Questions

$$35.01\% \text{ of } 899.96 - ? = 24.9\% \text{ of } 480$$

- a. 255
- b. 305
- c. 195
- d. 186
- e. 155

29. Questions

$$474.94 - 258.12 - 14.9\% \text{ of } 1200 = ?$$

- a. 37
- b. 116
- c. 127
- d. 89
- e. 70

30. Questions **$98.12 + 62.14 - 4.01 = ?$ of 8.01**

- a. 12.1
- b. 19.5
- c. 24.5
- d. 17.9
- e. 21.8

31. Questions**What value should come in the place of (?) in the following number series?****86, 114, ?, 194, 246**

- a. 150
- b. 180
- c. 225
- d. 220
- e. 136

32. Questions**?, 175, 351, 703, 1407**

- a. 85
- b. 87
- c. 95
- d. 120
- e. 55

33. Questions**7, 12, 19, 31, ?**

- a. 45
- b. 50
- c. 48
- d. 52
- e. 55

34. Questions

79, ?, 240, 583, 647

- a. 120
- b. 153
- c. 204
- d. 188
- e. 213

35. Questions

12, ?, 72, 288, 1440

- a. 18
- b. 24
- c. 30
- d. 32
- e. 60

36. Questions

Following question contains two equations as I and II. You have to solve both equations and determine the relationship between them and give answer as,

i). $x^2 + 13x + 42 = 0$

ii). $y^2 - 12y - 28 = 0$

- a. $x > y$
- b. $x \geq y$
- c. $x = y$ or relationship can't be determined
- d. $x < y$
- e. $x \leq y$

37. Questions

i). $x^2 - 36x + 288 = 0$

ii). $y^2 - 22y + 121 = 0$

- a. $x > y$
- b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

38. Questions

i). $2x^2 + 7x + 6 = 0$

ii). $4y^2 + 8y + 4 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

39. Questions

i). $x^2 + 2x - 15 = 0$

ii). $y = 2x + 12$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

40. Questions

i). $x^2 + 13x + 36 = 0$

ii). $y^2 + 8y + 15 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

Explanations:

1. Questions

The total number of blankets and shawls sold on all days = $240 * 100/2 = 12000$

The total number of blankets and shawls sold on Monday = $12000 * 12/100 = 1440$

The total number of blankets and shawls sold on Tuesday = $12000 * 28/100 = 3360$

The total number of blankets and shawls sold on Wednesday = $12000 * 34/100 = 4080$

The total number of blankets and shawls sold on Thursday = $12000 * 16/100 = 1920$

The total number of blankets and shawls sold on Friday = $12000 * 10/100 = 1200$

Answer: B

The total number of blankets and shawls sold on Wednesday = 4080

The number of shawls sold on Wednesday = $4080 * 5/8 = 2550$

The number of curtains sold on Wednesday = $2550 * 120/100 = 3060$

The number of curtains unsold on Wednesday = $3060 * 4/15 = 816$

2. Questions

The total number of blankets and shawls sold on all days = $240 * 100/2 = 12000$

The total number of blankets and shawls sold on Monday = $12000 * 12/100 = 1440$

The total number of blankets and shawls sold on Tuesday = $12000 * 28/100 = 3360$

The total number of blankets and shawls sold on Wednesday = $12000 * 34/100 = 4080$

The total number of blankets and shawls sold on Thursday = $12000 * 16/100 = 1920$

The total number of blankets and shawls sold on Friday = $12000 * 10/100 = 1200$

Answer: A

The total number of blankets and shawls sold on Saturday = $1440 + 1440/8 = 1620$

The number of shawls sold on Saturday = $1620 * 55/100 = 891$

3. Questions

The total number of blankets and shawls sold on all days = $240 * 100/2 = 12000$

The total number of blankets and shawls sold on Monday = $12000 * 12/100 = 1440$

The total number of blankets and shawls sold on Tuesday = $12000 * 28/100 = 3360$

The total number of blankets and shawls sold on Wednesday = $12000 * 34/100 = 4080$

The total number of blankets and shawls sold on Thursday = $12000 * 16/100 = 1920$

The total number of blankets and shawls sold on Friday = $12000 * 10/100 = 1200$

Answer: B

$P = 1920 - 1200 = 720$

$Q = 25$

Number of blankets sold on Thursday = $720 + 200 = 920$

Number of blankets sold on Friday = $24 * 25 = 600$

Number of shawls sold on Thursday = $1920 - 920 = 1000$

Number of shawls sold on Friday = $1200 - 600 = 600$

Difference = $1000 - 600 = 400$

4. Questions

The total number of blankets and shawls sold on all days = $240 * 100/2 = 12000$

The total number of blankets and shawls sold on Monday = $12000 * 12/100 = 1440$

The total number of blankets and shawls sold on Tuesday = $12000 * 28/100 = 3360$

The total number of blankets and shawls sold on Wednesday = $12000 * 34/100 = 4080$

The total number of blankets and shawls sold on Thursday = $12000 * 16/100 = 1920$

The total number of blankets and shawls sold on Friday = $12000 * 10/100 = 1200$

Answer: E

The total number of blankets and shawls sold on all shops together = 12000

The total number of blankets and shawls unsold on all shops together = $12000 * 80/100 = 9600$

5. Questions

The total number of blankets and shawls sold on all days = $240 * 100/2 = 12000$

The total number of blankets and shawls sold on Monday = $12000 * 12/100 = 1440$

The total number of blankets and shawls sold on Tuesday = $12000 * 28/100 = 3360$

The total number of blankets and shawls sold on Wednesday = $12000 * 34/100 = 4080$

The total number of blankets and shawls sold on Thursday = $12000 * 16/100 = 1920$

The total number of blankets and shawls sold on Friday = $12000 * 10/100 = 1200$

Answer: B

The total number of blankets and shawls sold on Friday = 1200

The ratio of number of blankets to shawls sold on Friday = $140 : 100 = 7:5$

The number of blankets sold on Friday = $1200 * 7/12 = 700$

6. Questions

Train	The total number of people who booked tickets
A	360
B	420
C	520
D	300
E	400

Answer: A

The total number of people who booked tickets for train B = 420

The number of male who booked tickets for train B = $420 * 30/100 = 126$

The number of females who booked tickets for train B = $420 * 70/100 = 294$

The number of males who booked tickets for train C = $126 + 24 = 150$

The number of females who booked tickets for train C = $520 - 150 = 370$

Required sum = $370 + 294 = 664$

7. Questions

Train	The total number of people who booked tickets
A	360
B	420
C	520
D	300
E	400

Answer: B

The total number of people who booked tickets for train A = 360

The number of people who booked tickets for train A from Mumbai = $360 * 20/100 = 72$

The number of people who booked tickets for train A from Delhi = $360 * 1/6 = 60$

The number of people who booked tickets for train A from Bangalore = $360 - 60 - 72 = 228$

Required difference = $228 - 132 = 96$

8. Questions

Train	The total number of people who booked tickets
A	360
B	420
C	520
D	300
E	400

Answer: B

The number of people who booked tickets for train A, C and E = $(360 + 520 + 400) = 1280$

9. Questions

Train	The total number of people who booked tickets
A	360
B	420
C	520
D	300
E	400

Answer: E

Ratio of a:b = 420: 300 = 7:5

The number of people who books tickets for train F = $15 * 7 + 12 * 5 = 165$

Number of people other than males who booked tickets for train F = $165 - [30/100 * 400] = 45$

10. Questions

Train	The total number of people who booked tickets
A	360
B	420
C	520
D	300
E	400

Answer: B

The number of people who booked tickets through online for train A = $360 * 5/12 = 150$

11. Questions

The number of books in shelf R = 25

The number of books in shelf P = $25 - 5 = 20$

The number of notes in shelf P = $20 * 4/1 = 80$

The number of notes in shelf Q = $80/2 = 40$

The number of notes in shelf R = $155 - 80 - 40 = 35$

The number of books in shelf Q = $3*20 = 60$

Month	The number of books	The number of notes
P	20	80
Q	60	40
R	25	35

Answer: C

The number of pencils in shelf Q = $(60-40) = 20$

Required ratio = $20:40 = 1:2$

12. Questions

The number of books in shelf R = 25

The number of books in shelf P = $25 - 5 = 20$

The number of notes in shelf P = $20 * 4/1 = 80$

The number of notes in shelf Q = $80/2 = 40$

The number of notes in shelf R = $155 - 80 - 40 = 35$

The number of books in shelf Q = $3*20 = 60$

Month	The number of books	The number of notes
P	20	80
Q	60	40
R	25	35

Answer: C

The total number of books in all the three shelves together = $(20+60+25) = 105$

13. Questions

The number of books in shelf R = 25

The number of books in shelf P = $25 - 5 = 20$

The number of notes in shelf P = $20 * 4/1 = 80$

The number of notes in shelf Q = $80/2 = 40$

The number of notes in shelf R = $155 - 80 - 40 = 35$

The number of books in shelf Q = $3*20 = 60$

Month	The number of books	The number of notes
P	20	80
Q	60	40
R	25	35

Answer: B

The number of notes in shelf R = 35

The number of books in shelf P = 20

Required sum = $35 + 20 = 55$

14. Questions

The number of books in shelf R = 25

The number of books in shelf P = $25 - 5 = 20$

The number of notes in shelf P = $20 * 4/1 = 80$

The number of notes in shelf Q = $80/2 = 40$

The number of notes in shelf R = $155 - 80 - 40 = 35$

The number of books in shelf Q = $3*20 = 60$

Month	The number of books	The number of notes
P	20	80
Q	60	40
R	25	35

Answer: A

The number of notes in shelf S = $40 * 110/100 = 44$

The number of books in shelf S = $20 * 100/80 = 25$

Required sum = $44+25= 69$

15. Questions

The number of books in shelf R = 25

The number of books in shelf P = $25 - 5 = 20$

The number of notes in shelf P = $20 * 4/1 = 80$

The number of notes in shelf Q = $80/2 = 40$

The number of notes in shelf R = $155 - 80 - 40 = 35$

The number of books in shelf Q = $3*20 = 60$

Month	The number of books	The number of notes
P	20	80
Q	60	40
R	25	35

Answer: B

Required percentage = $80/25 * 100 = 320\%$

16. Questions

Answer: A

According to the question,

The ratio of profit share of Rajesh, Suresh and Kavin = $(8000 * 24) : (4000 * 24) : (12000 * 12) = 4:2:3$

The profit share of Rajesh = $10800 * 4/9 = \text{Rs. } 4800$

The profit share of Kavin = $10800 * 3/9 = \text{Rs. } 3600$

Required difference = $4800 - 3600 = \text{Rs. } 1200$

17. Questions

Answer: B

According to the question,

Ratio of the initial quantity of milk to water in the mixture = 7:5

The initial quantity of milk in the mixture = $7x$

The initial quantity of water in the mixture = $5x$

$(7x - 60 * 7/12 + 70) / (5x - 60 * 5/12) = 7/3$

$(7x - 35 + 70) / (5x - 25) = 7/3$

$21x + 105 = 35x - 175$

$14x = 280$

$x = 20$

The initial quantity of milk and water in the mixture = $12x = 240$ litres

18. Questions

Answer: A

According to the question,

A's age 4 years hence = $21x$

B's age 4 years ago = $19x$

$$21x - 4 + 19x + 4 = 80$$

$$40x = 80$$

$$x = 2$$

The present age of A = $21 * 2 - 4 = 38$ years

The present age of B = $19 * 2 + 4 = 42$ years

The present age of C = $38 - 13 = 25$ years

Required sum = $42 + 25 = 67$ years

19. Questions

Answer: C

According to the question,

Let, the cost price of the article = $5x$

The marked price of the article = $8x$

$$5x + 70 = 8x * 80/100$$

$$5x + 70 = 6.4x$$

$$-1.4x = -70$$

$$x = 50$$

The cost price of the article = $5 * 50 = \text{Rs. } 250$

The marked price of the article = $8 * 50 = \text{Rs. } 400$

Required difference = $400 - 250 = \text{Rs. } 150$

20. Questions

Answer: A

According to the question,

The speed of boat in still water = $4x$

The speed of stream = x

The downstream speed of the boat = $(4x + x) = 5x$ km/hr

The upstream speed of the boat = $(4x - x) = 3x$ km/hr

$$5x - 3x = 4$$

$$2x = 4$$

$$x = 2$$

The speed of the boat in still water = $4 * 2 = 8$ km/hr

The speed of the stream = $1 * 2 = 2$ km/hr

Required time taken = $(210/10) + (216/6) = 21 + 36 = 57$ hours

21. Questions

Answer: C

According to the question,

The total distance covered by the man = $25 * 8 = 200$ km

20% of the journey = $200 * 20/100 = 40$ km

20% of the remaining journey = $160 * 20/100 = 32$ km

Required speed = $128/(8 - 2 - 2) = 128/4 = 32$ km/hr

22. Questions

Answer: B

According to the question,

A can complete the work = 20 days

B can complete the work = 12 days

Let, the total work = 60 units

The efficiency of A = $60/20 = 3$ units

The efficiency of B = $60/12 = 5$ units

$$8 * x + 5 * 4 = 60$$

$$8x + 20 = 60$$

$$8x = 40$$

$$x = 5$$

23. Questions

Answer: A

According to the question,

For scheme A,

The amount invested = $5000 * 20/100 =$ Rs.1000

$$CI = P(1+R/100)^n - P$$

$$CI = 1000 * 1.1 * 1.1 - 1000$$

$$CI = 210$$

For scheme B,

The amount invested = $5000 * 80/100 =$ Rs. 4000

$$SI = 4000 * 20/100 * 2$$

$$SI = 1600$$

$$\text{Required difference} = 1600 - 210 = \text{Rs. 1390}$$

24. Questions

Answer: B

According to the question,

$$\text{The number of people who bought ice creams} = 11x$$

$$\text{The number of people who bought chocolates} = 15x$$

$$\text{The number of males who bought ice creams} = 11x * 45/100 = 4.95x$$

$$\text{The number of females who bought ice cream} = 11x - 4.95x = 6.05x$$

$$6.05x = 121$$

$$x = 20$$

$$\text{The total number of people who bought chocolates} = 15 * 20 = 300$$

25. Questions

Answer: A

According to the question,

$$\text{The number of red balls} = x$$

$$\text{The number of green balls} = 6$$

$$\text{The number of blue balls} = 2$$

$$xC_1/(8+x)C_1 = 1/3$$

$$3x = 8 + x$$

$$2x = 8$$

$$x = 4$$

$$\text{Required probability} = (4C_1 * 6C_1)/12C_2 = (4 * 6)/(12 * 11/2) = 4/11$$

26. Questions

Answer: B

$$(9^3 * 8)/? = 324$$

$$729 * 8 / 324 = ?$$

$$? = 18$$

27. Questions

Answer: B

$$(20\% \text{ of } 15^2) / ? = 10$$

$$0.2 * 225 / ? = 10$$

$$45 / ? = 10$$

$$? = 45/10$$

$$? = 4.5$$

28. Questions**Answer: C**

$$35\% \text{ of } 900 - ? = 25\% \text{ of } 480$$

$$(35/100) * 900 - ? = 0.25 * 480$$

$$315 - ? = 120$$

$$? = 195$$

29. Questions**Answer: A**

$$475 - 258 - 15\% \text{ of } 1200 = ?$$

$$217 - 0.15 * 1200 = ?$$

$$? = 217 - 180$$

$$? = 37$$

30. Questions**Answer: B**

$$98 + 62 - 4 = ? * 8$$

$$156 = ? * 8$$

$$? = 156/8$$

$$? = 19.5$$

31. Questions**Answer: A**

$$50 + 6^2 = 86$$

$$50 + 8^2 = 114$$

$$50 + 10^2 = 150$$

$$50 + 12^2 = 194$$

$$50 + 14^2 = 246$$

32. Questions**Answer: B**

$$87 * 2 + 1 = 175$$

$$175 * 2 + 1 = 351$$

$$351 * 2 + 1 = 703$$

$$703 * 2 + 1 = 1407$$

33. Questions**Answer: B**

$$7 + 5 = 12$$

$$12 + 7 = 19$$

$$19 + 12 = 31$$

$$31 + 19 = 50$$

34. Questions**Answer: C**

$$79 + 5^3 = 204$$

$$204 + 6^2 = 240$$

$$240 + 7^3 = 583$$

$$583 + 8^2 = 647$$

35. Questions**Answer: B**

$$12 * 2 = 24$$

$$24 * 3 = 72$$

$$72 * 4 = 288$$

$$288 * 5 = 1440$$

36. Questions**Answer: D**

$$x^2 + 6x + 7x + 42 = 0$$

$$(x + 6)(x + 7) = 0$$

$$x = -6, -7$$

$$y^2 - 14y + 2y - 28 = 0$$

$$(y - 14)(y + 2) = 0$$

$$y = 14, -2$$

Hence, $x < y$

37. Questions

Answer: A

$$x^2 - 24x - 12x + 288 = 0$$

$$(x - 24)(x - 12) = 0$$

$$x = 24, 12$$

$$y^2 - 11y - 11y + 121 = 0$$

$$(y - 11)(y - 11) = 0$$

$$y = 11, 11$$

Hence, $x > y$

38. Questions

Answer: D

$$2x^2 + 7x + 6 = 0$$

$$2x^2 + 3x + 4x + 6 = 0$$

$$(2x + 3)(x + 2) = 0$$

$$x = -1.5, -2$$

$$4y^2 + 4y + 4y + 4 = 0$$

$$(4y + 4)(4y + 4) = 0$$

$$y = -1, -1$$

Hence, $x < y$

39. Questions

Answer: C

$$x^2 + 5x - 3x - 15 = 0$$

$$(x + 5)(x - 3) = 0$$

$$x = -5, 3$$

$$y = -10 + 12 = 2$$

$$y = 6 + 12 = 18$$

Hence, $x = y$ or relationship cannot be determined

40. Questions

Answer: C

$$x^2 + 9x + 4x + 36 = 0$$

$$(x+9)(x+4) = 0$$

$$x = -9, -4$$

$$y^2 + 5y + 3y + 15 = 0$$

$$(y+5)(y+3) = 0$$

$$y = -5, -3$$

Hence, x = y or relationship cannot be determined