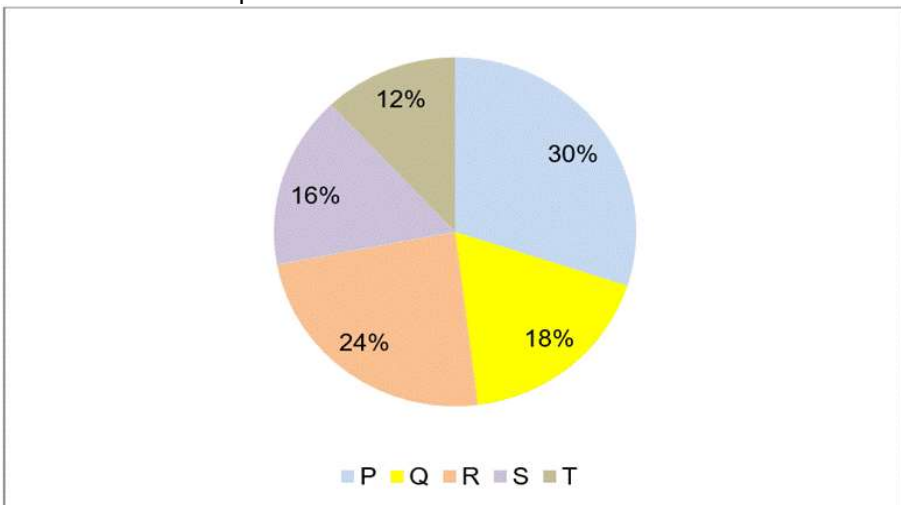


{MATH PAPER TEST 7}

Directions [Set of 4 Questions]: Answer the questions based on the information given below.

The pie chart given below shows the percentage distribution of the cost price of five different items bought by Tanya out of the total cost price of all five items together.

Note: The total cost price of all five items is Rs. 4500.



- Q1.** If 'P' is sold at a profit of 20%, then find the selling price of 'P'.
A.Rs. 1800 B.Rs. 1620 C.Rs. 1420 D.Rs. 1440 E.Rs. 1680
- Q2.** If 'R' is marked 40% above its cost price and 'T' is marked 20% above its cost price, then find the ratio of the marked price of 'R' to that of 'T'.
A.3:1 B.7:3 C.9:4 D.5:2 E.7:2
- Q3.** Tanya sold 'S' and 'Q' at a loss of Rs. 120 and at a profit of Rs. 90 respectively. Find the difference between the selling prices of 'S' and 'Q'.
A.Rs. 200 B.Rs. 420 C.Rs. 320 D.Rs. 250 E.Rs. 300
- Q4.** The cost price of another article 'V' is Rs. 240 more than the average cost price of articles 'R' and 'S'. Find the cost price of article 'V'.
A.Rs. 1080 B.Rs. 960 C.Rs. 1440 D.Rs. 1260 E.Rs. 1140
- Q5.** What will come in place of the question mark (?) in the following series?
54, 60, 70, ?, 102, 124
A.84 B.94 C.78 D.89 E.86
- Q6.** What will come in place of the question mark (?) in the following series?
28, 32, 41, ?, 82, 118
A.63 B.57 C.52 D.55 E.61
- Q7.** What will come in place of the question mark (?) in the following series?
3.5, 4.5, 10, 31, 125, ?
A.588 B.626 C.676 D.598 E.548
- Q8.** What will come in place of the question mark (?) in the following series?
?, 33, 49, 65, 81, 97
A.21 B.9 C.17 D.12 E.18
- Q9.** What will come in place of the question mark (?) in the following series?
11, 12, 15, ?, 51, 132
A.32 B.30 C.36 D.24 E.20

Q10. What will come in place of the question mark (?) in the following series?

2, 3, 5, ?, 13, 21, 34

A.6 B.8 C.10 D.9 E.12

Q11. Total time taken by a boat to cover 135 km downstream as well as upstream is 24 hours. The ratio of the speed of boat in still water to the speed of the stream is 4:1 respectively. Find the downstream distance covered by the boat in 4 hours.

A.64 km B.80 km C.60 km D.90 km E.120 km

Q12. The curved surface area of a cylinder is 880 cm² and the height of the cylinder is 10 cm. Find the volume of the cylinder.

A.4560 cm³ B.6160 cm³ C.5260 cm³ D.6420 cm³ E.None of these

Q13. 'W' invested Rs. 24,000 on compound interest at 20% p.a. compounded annually for 'n' years. After 'n' years, he received a total amount of Rs. 34560. Find the value of 'n'.

A.1 B.3 C.2 D.1.5 E.2.5

Q14. The ratio of the present age of 'M' to the age of 'N' 5 years ago from now is 3:4 respectively. 5 years hence from now, the average age of 'M' and 'N' will be 42.5 years. Find the present age of 'N'.

A.40 years B.30 years C.35 years D.45 years E.50 years

Q15. 'M' spends 40% of his total income. If his income increased by 40% and his expenditure also increased by 30%, then find the percentage of change in the savings of 'M'.

a. 46 2/3% decreased b. 46 2/3% increased c. 33 2/3% increased d. 3 1/3% decreased e. None of these

Q16. What will come in the place of question mark (?) in the given expression?

$$\{(324 \div 18) + 24\} \div 7 = ?$$

A.10 B.8 C.6 D.12 E.16

Q17. What will come in the place of question mark (?) in the given expression?

$$\{(24^2 - 12^2) \div 108\} \times 25 = ?^2$$

A.12 B.15 C.10 D.8 E.5

Q18. What will come in the place of question mark (?) in the given expression?

$$(45\% \text{ of } 320 + 25\% \text{ of } 160) \div 92 = ?$$

A.5 B.15 C.2 D.12 E.8

Q19. What will come in the place of question mark (?) in the given expression?

$$(24 \times 25) \div 15 + 3^2 = ?^2$$

A.10 B.8 C.5 D.7 E.12

Q20. What will come in the place of question mark (?) in the given expression?

$$\{(176 \div 11) \% \text{ of } 700\} \div 4 = ?$$

A.28 B.18 C.32 D.40 E.22

Q21. What will come in the place of question mark (?) in the given expression?

$$(90 \div 18) \% \text{ of } 2500 + 35\% \text{ of } 200 = ?$$

A.220 B.155 C.235 D.135 E.195

Q22. What will come in the place of question mark (?) in the given expression?

$$(45^2 + 35^2) \div 5 = ? \times 13$$

A.35 B.45 C.80 D.50 E.70

Q23. What will come in the place of question mark (?) in the given expression?

$$2 \ 45 + 1 \ 56 + 3 \ 23 - ? = 78$$

a. 17 740 b. 11 110 c. 7 710 d. 7 1740 e. 7 1720

Q24. What will come in the place of question mark (?) in the given expression?

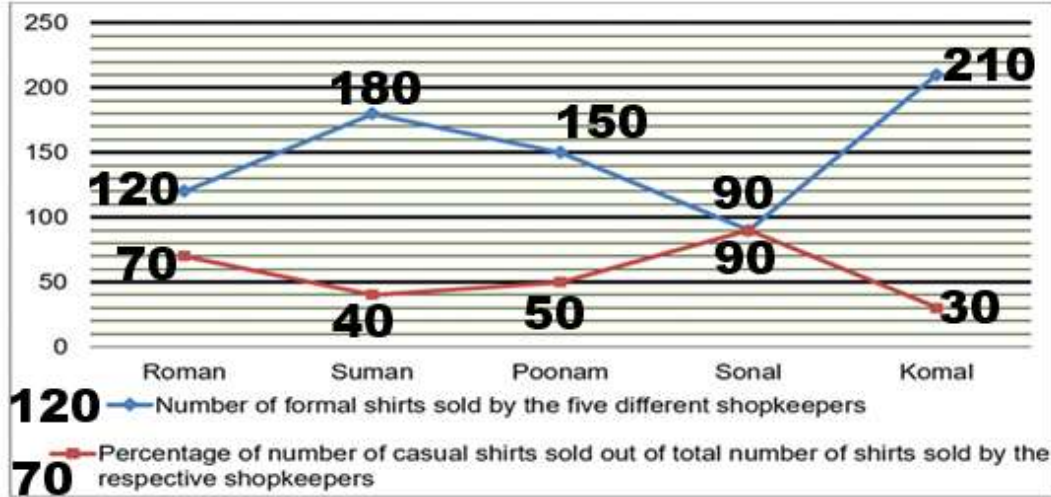
$$\{(320 \div 4) + (120 \div 15)\} \% \text{ of } 400 = ? \times 11$$

A.36 B.28 C.32 D.52 E.24

Directions [Set of 5 Questions]: Answer the questions based on the information given below.

The line graph given below shows the number of formal shirts sold by the five different shopkeeper and percentage of number of casual shirts sold by the respective shopkeepers out of total number of shirts sold by them.

Note: Total number of shirts sold by each shopkeeper = Number of formal shirts sold + number of casual shirts sold



Q25. Find the difference between total number of shirts sold by Sonal and Roman.

- A.100 B.200 C.600 D.800 E.500

Q26. Out of total number of formal shirts and casual shirts sold by Poonam, 42% and 36% respectively are sold to females. Find the total number of shirts sold by Poonam to males.

- A.178 B.132 C.183 D.163 E.180

Q27. The selling price of formal and casual shirts sold by Komal is Rs. 300 and Rs. 200 respectively. Find the total revenue generated by Komal by selling all the shirts.

- A.Rs. 63000 B.Rs. 72000 C.Rs. 75000 D.Rs. 81000 E.Rs. 90000

Q28. Out of total number of casual shirts sold by Suman and Sonal, 30% and 80% respectively are damaged. Find the number of casual shirts sold by Suman and Sonal which are not damaged.

- A.296 B.248 C.264 D.246 E.288

Q29. Find the average number of formal shirts sold by Roman, Suman and Sonal.

- A.150 B.112 C.100 D.120 E.130

Q30. 'D' and 'E' together start a business by investing Rs. 45,000 and Rs. 'Y'. After 8 months, 'D' increased his investment by 20% and after 2 more months 'E' leaves the business. At the end of the year, 'E' received Rs. 7000 out of total profit of Rs. 18520. Find the value of 'Y'.

- A.Rs. 30,000 B.Rs. 28,000 C.Rs. 35,000 D.Rs. 45,000 E.Rs. 40,000

Q31. Mixture 'A' of milk and water contains 35% water while mixture 'B' contains 45% milk. In what ratio should 'A' and 'B' be mixed so that the final mixture contains 50% of milk?

- A.4:3 B.3:4 C.3:1 D.1:3 E.1:4

Q32. 'S' and 'D' can together complete a work in 36 days. They do the work together for 6 days after that remaining work is completed by 'D' in 40 days. Find the number of days taken by 'S' alone to complete the whole work alone.

- A.128 days B.132 days C.144 days D.108 days E.156 days

Q33. In an office of 450 people. The ratio of number of freshers to number of experienced people is 5:4. The ratio of male freshers to female freshers is 3:2 and experienced males to experienced females is 13:12 respectively. Find the total number of females in the office.

- A.254 B.234 C.196 D.204 E.246

Q34. The ratio of the profit share received by 'H' and 'J' is 12:25 respectively. If the ratio of the investment of 'H' and 'J' is 4:5 respectively, then find the ratio of the time for which 'H' and 'J' respectively invested their amount.

- A.3:4 B.2:3 C.5:8 D.3:5 E.1:2

Q35. A thief is running at a speed of 24 m/sec and a policeman starts running behind him after 12 seconds with speed of 32 m/sec. Find the time taken by the policeman to catch the thief.

- A.56 seconds B.24 seconds C.30 seconds D.32 seconds E.36 seconds

Directions [Set of 5 Questions]: Answer the questions based on the information given below. The table given below shows the number of roses in five different gardens, number of lilies as percentage of number of roses in respective garden and ratio between number of lilies to number of irises in respective garden.

Note: Total number of flowers in each garden = number of roses + number of lilies + number of irises

Gardens	Number of roses	Number of lilies as a percentage of number of roses	Ratio between number of lilies to number of irises
A	320	80%	16:25
B	400	75%	3:5
C	560	60%	14:15
D	480	90%	3:2
E	360	85%	17:10

Q36. Find the ratio between total number of flowers in 'C' to that in 'A'.

- A.117:100 B.157:122 C.113:102 D.117:92 E.112:85

Q37. Find the difference between number of irises in 'D' and number of lilies in 'B'.

- A.30 B.20 C.42 D.32 E.12

Q38. What is the average number of lilies in 'C', 'D' and 'E'?

- A.378 B.364 C.298 D.358 E.366

Q39. Number of roses in 'B' is how much percent more than that in 'E'?

- a. 5% b. 12% c. 9% d. 15% e. 11 19%

Q40. Find the sum of number of lilies in 'A' and the number of Irises in 'C'.

- A.512 B.496 C.656 D.616 E.584

1.B

Solution

For 'P':

The cost price of 'P' = $4500 \times 0.3 = \text{Rs. } 1350$

Similarly,

Items	Cost price of respective items
P	Rs. 1350
Q	Rs. 810
R	Rs. 1080
S	Rs. 720
T	Rs. 540

The selling price of 'P' = $1350 \times 1.2 = \text{Rs. } 1620$

Hence, option b.

2. B

Solution

For 'P':

The cost price of 'P' = $4500 \times 0.3 = \text{Rs. } 1350$

Similarly,

Items	Cost price of respective items
P	Rs. 1350
Q	Rs. 810
R	Rs. 1080
S	Rs. 720
T	Rs. 540

Marked price of 'R' = $1080 \times 1.4 = \text{Rs. } 1512$

Marked price of 'T' = $540 \times 1.2 = \text{Rs. } 648$

So, required ratio = 7:3

Hence, option b.

3.E

Solution

For 'P':

The cost price of 'P' = $4500 \times 0.3 = \text{Rs. } 1350$

Similarly,

Items	Cost price of respective items
P	Rs. 1350
Q	Rs. 810

R	Rs. 1080
S	Rs. 720
T	Rs. 540

Selling price of 'S' = $720 - 120 = \text{Rs. } 600$

Selling price of 'Q' = $810 + 90 = \text{Rs. } 900$

So, required difference = $900 - 600 = \text{Rs. } 300$

Hence, option e.

4.E

olution

For 'P':

The cost price of 'P' = $4500 \times 0.3 = \text{Rs. } 1350$

Similarly,

Items	Cost price of respective items
P	Rs. 1350
Q	Rs. 810
R	Rs. 1080
S	Rs. 720
T	Rs. 540

Average of the cost price of articles 'R' and 'S' = $(1080 + 720) \div 2 = 900$

So, cost price of article 'V' = $900 + 240 = \text{Rs. } 1140$

Hence, option e.

5.A

Solution

The given series follows the following pattern:

Hence, option a.

6.B

Solution

The given series follows the following pattern:

$$28 + 2^2 = 32$$

$$32 + 3^2 = 41$$

$$41 + 4^2 = 57$$

$$57 + 5^2 = 82$$

$$82 + 6^2 = 118$$

Hence, option b.

7.B

Solution

The given series follows the following pattern:

$$3.5 \times 1 + 1 = 4.5$$

$$4.5 \times 2 + 1 = 10$$

$$10 \times 3 + 1 = 31$$

$$31 \times 4 + 1 = 125$$

$$125 \times 5 + 1 = 626$$

Hence, option b.

8.C

Solution

The given series follows the following pattern:

$$17 + 16 = 33$$

$$33 + 16 = 49$$

$$49 + 16 = 65$$

$$65 + 16 = 81$$

$$81 + 16 = 97$$

Hence, option c.

9.D

Solution

The given series follows the following pattern:

$$11 + 3^0 = 12$$

$$12 + 3^1 = 15$$

$$15 + 3^2 = 24$$

$$24 + 3^3 = 51$$

$$51 + 3^4 = 132$$

Hence, option d.

10.B

Solution

The given series follows the following pattern:

$$2 + 3 = 5$$

$$5 + 3 = 8$$

$$8 + 5 = 13$$

$$13 + 8 = 21$$

$$21 + 13 = 34$$

Hence, option b.

11.C

Solution

Let the speed of boat in still water and speed of stream be $4x$ km/hr and ' x ' km/hr respectively.

So, downstream speed of boat = $4x + x = 5x$ km/hr

Or, upstream speed of boat = $4x - x = 3x$ km/hr

ATQ,

$$\text{Or, } (135/5x) + (135/3x) = 24$$

$$\text{Or, } (27/x) + (45/x) = 24$$

$$\text{Or, } (72/x) = 24$$

$$\text{So, 'x' = 3}$$

So, downstream speed of boat = $5 \times 3 = 15$ km/hr

So, required distance = $15 \times 4 = 60$ km

Hence, option c.

12.B

Solution

We know that, curved surface area of the cylinder = $2 \times \pi \times \text{radius} \times \text{height}$

So, $880 = 2 \times (22/7) \times \text{radius} \times 10$

So, radius = $880 \times (7/440) = 14$ cm

So, required volume of cylinder = $\pi \times \text{radius}^2 \times \text{height}$

So, required volume = $(22/7) \times 14 \times 14 \times 10 = 6160 \text{ cm}^3$

Hence, option b.

13.C

Solution

$$\text{Amount received} = \text{Principal} \times \left(1 + \frac{r}{100}\right)^{\text{time}}$$

We know that,

$$\text{So, } 34560 = 24000 \times (1 + 0.2)^n$$

$$\text{Or, } (34560/24000) = (1.2)^n$$

$$\text{Or, } (144/100) = (6/5)^n$$

$$\text{Or, } (6/5)^2 = (6/5)^n$$

$$\text{So, 'n' = 2}$$

Hence, option c.

14.D

Solution

Let the present age of 'M' and the age of 'N' 5 years ago be $3x$ years and $4x$ years respectively.

So, the present age of 'N' = $(4x + 5)$ years

ATQ,

$$4x + 5 + 3x = 42.5 \times 2 - 10$$

$$\text{Or, } 7x = 70$$

$$\text{So, 'x' = 10}$$

So, require age of 'N' = $4 \times 10 + 5 = 45$ years

Hence, option d.

15.B

Solution

Let the income of 'M' be Rs. $100x$

So, the savings of 'M' = $100x \times 0.6 = \text{Rs. } 60x$

Increased income of 'M' = $100x \times 1.4 = \text{Rs. } 140x$

Increased expenditure of 'M' = $(100x - 60x) \times 1.3 = \text{Rs. } 52x$

New savings of 'M' = $140x - 52x = 88x$

$$\text{So, required percentage} = \{(88x - 60x) / 60x\} \times 100 = 46\frac{2}{3}\% \text{ increased}$$

Hence, option b.

16.C

Solution

$$\{(324 \div 18) + 24\} \div 7 = ?$$

$$\{(18 + 24) \div 7 = ?$$

$$42 \div 7 = ?$$

$$? = 6$$

Hence, option c.

17.C

Solution

$$\{(24^2 - 12^2) \div 108\} \times 25 = ?^2$$

$$\{(576 - 144) \div 108\} \times 25 = ?^2$$

$$\{432 \div 108\} \times 25 = ?^2$$

$$4 \times 25 = ?^2$$

$$100 = ?^2$$

$$? = \pm 10$$

Hence, option c.

Previous

18.C

Solution

$$(45\% \text{ of } 320 + 25\% \text{ of } 160) \div 92 = ?$$

$$(0.45 \times 320 + 0.25 \times 160) \div 92 = ?$$

$$(144 + 40) \div 92 = ?$$

$$184 \div 92 = ?$$

$$? = 2$$

Hence, option c.

19.D

Solution

$$(24 \times 25) \div 15 + 3^2 = ?^2$$

$$600 \div 15 + 9 = ?^2$$

$$40 + 9 = ?^2$$

$$49 = ?^2$$

$$? = \pm 7$$

Hence, option d.

20.A

Solution

$$\{(176 \div 11) \% \text{ of } 700\} \div 4 = ?$$

$$\{(0.16 \times 700) \div 4 = ?$$

$$112 \div 4 = ?$$

$$? = 28$$

Hence, option a.

21.E

Solution

$$(90 \div 18) \% \text{ of } 2500 + 35\% \text{ of } 200 = ?$$

$$5\% \text{ of } 2500 + 0.35 \times 200 = ?$$

$$0.05 \times 2500 + 70 = ?$$

$$125 + 70 = ?$$

$$? = 195$$

Hence, option e.

22.D

Solution

$$(45^2 + 35^2) \div 5 = ? \times 13$$

$$(2025 + 1225) \div 5 = ? \times 13$$

$$(3250) \div 5 = ? \times 13$$

$$650 = ? \times 13$$

$$? = (650/13)$$

$$? = 50$$

Hence, option d.

23.D

Solution

$$2\frac{4}{5} + 1\frac{5}{6} + 3\frac{2}{3} - ? = \frac{7}{8}$$

$$\frac{14}{5} + \frac{11}{6} + \frac{11}{3} - ? = \frac{7}{8}$$

$$\frac{84 + 55 + 110}{30} - ? = \frac{7}{8}$$

$$\frac{249}{30} - ? = \frac{7}{8}$$

$$? = \frac{249}{30} - \frac{7}{8}$$

24.C

Solution

$$\{(320 \div 4) + (120 \div 15)\} \% \text{ of } 400 = ? \times 11$$

$$(80 + 8) \% \text{ of } 400 = ? \times 11$$

$$0.88 \times 400 = ? \times 11$$

$$352 = ? \times 11$$

$$? = 32$$

Hence, option c.

25.E

Solution

For Roman:

Let the total number of shirts sold be 100x.

So, number of formal shirts sold = $100x \times 0.30 = 30x$

$$\text{Or, } 30x = 120$$

So, 'x' = 4

So, total number of shirts = $100 \times 4 = 400$

Number of casual shirts sold = $400 - 120 = 280$

Similarly,

Shopkeeper	Number of formal shirts sold	Number of casual shirts sold	Total number of shirts sold
Roman	120	280	400
Suman	180	120	300
Poonam	150	150	300
Sonal	90	810	900
Komal	210	90	300

Required difference = $900 - 400 = 500$

Hence, option e.

26.C

Solution

For Roman:

Let the total number of shirts sold be 100x.

So, number of formal shirts sold = $100x \times 0.30 = 30x$

$$\text{Or, } 30x = 120$$

So, 'x' = 4

So, total number of shirts = $100 \times 4 = 400$

Number of casual shirts sold = $400 - 120 = 280$

Similarly,

Shopkeeper	Number of formal shirts sold	Number of casual shirts sold	Total number of shirts sold
Roman	120	280	400
Suman	180	120	300
Poonam	150	150	300
Sonal	90	810	900
Komal	210	90	300

Number of formal shirts sold to males = $150 - 150 \times 0.42 = 87$
 Number of casual shirts sold to males = $150 - 150 \times 0.36 = 96$
 So, required number of shirts = $87 + 96 = 183$
 Hence, option c.

27.D

Solution

For Roman:

Let the total number of shirts sold be $100x$.

So, number of formal shirts sold = $100x \times 0.30 = 30x$

Or, $30x = 120$

So, $x = 4$

So, total number of shirts = $100 \times 4 = 400$

Number of casual shirts sold = $400 - 120 = 280$

Similarly,

Shopkeeper	Number of formal shirts sold	Number of casual shirts sold	Total number of shirts sold
Roman	120	280	400
Suman	180	120	300
Poonam	150	150	300
Sonal	90	810	900
Komal	210	90	300

So, required amount = Rs. $(300 \times 210 + 200 \times 90)$ = Rs. 81,000
 Hence, option d.

28.D

Solution

For Roman:

Let the total number of shirts sold be $100x$.

So, number of formal shirts sold = $100x \times 0.30 = 30x$

Or, $30x = 120$

So, $x = 4$

So, total number of shirts = $100 \times 4 = 400$

Number of casual shirts sold = $400 - 120 = 280$

Similarly,

Shopkeeper	Number of formal shirts sold	Number of casual shirts sold	Total number of shirts sold
Roman	120	280	400
Suman	180	120	300
Poonam	150	150	300
Sonal	90	810	900
Komal	210	90	300

Number of casual shirts sold by Suman which are not damaged = $120 \times 0.7 = 84$
 Number of casual shirts sold by Sonal which are not damaged = $810 \times 0.2 = 162$
 So, required number of shirts = $84 + 162 = 246$
 Hence, option d.

29.E

Solution

For Roman:

Let the total number of shirts sold be $100x$.

So, number of formal shirts sold = $100x \times 0.30 = 30x$

Or, $30x = 120$

So, $x = 4$

So, total number of shirts = $100 \times 4 = 400$

Number of casual shirts sold = $400 - 120 = 280$

Similarly,

Shopkeeper	Number of formal shirts sold	Number of casual shirts sold	Total number of shirts sold
Roman	120	280	400
Suman	180	120	300
Poonam	150	150	300
Sonal	90	810	900
Komal	210	90	300

Number of casual shirts sold by Suman which are not damaged = $120 \times 0.7 = 84$
 Number of casual shirts sold by Sonal which are not damaged = $810 \times 0.2 = 162$
 So, required number of shirts = $84 + 162 = 246$
 Hence, option d.

30.C

Solution

Ratio of profit share of 'D' and 'E' respectively,
 = $\{(45,000 \times 8) + (54,000 \times 4)\} : \{y \times 10\}$
 = $57600 : y$

Profit share received by 'D' = $18520 - 7000 =$ Rs. 11520
 ATQ,

Or, $(57600/y) = (11520/7000)$

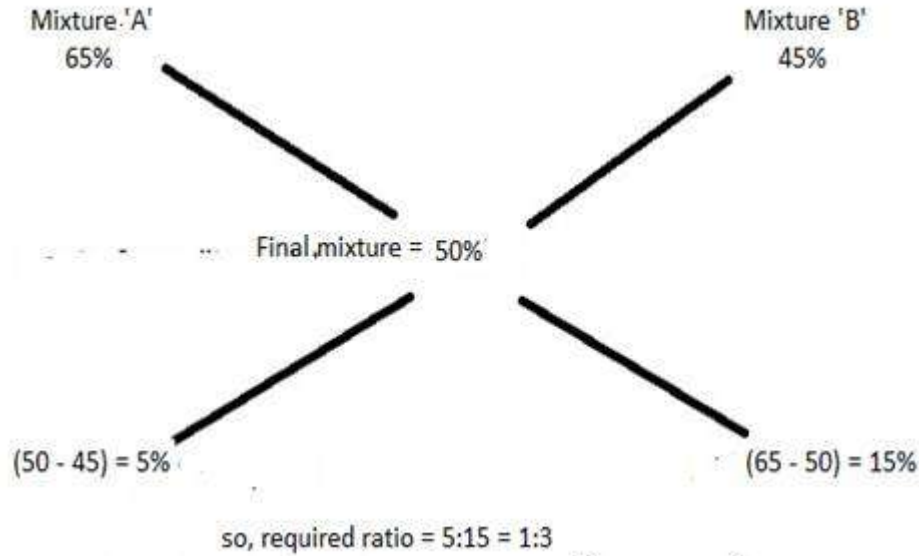
Or, $y = (57600 \times 7000) \div 11520 = \text{Rs. } 35,000$

Hence, option c.

31.D

Solution

Quantity of milk in 'A' = $100 - 35 = 65\%$



So, ratio in which 'A' and 'B' must be mixed = 1:3

Hence, option d.

32.C

olution

Fraction of work completed by 'S' and 'D' = $(6/36) = (1/6)$

So, remaining work = $1 - (1/6) = (5/6)$

So, time taken by 'D' to complete the entire work alone = $40 \times (6/5) = 48$ days

Let the total work be $144x$ (LCM of 36 and 48) .

Total efficiency of 'S' and 'D' = $(144x/36) = 4x$ units/day

Efficiency of 'D' = $(144x/48) = 3x$ units/day

So, efficiency of 'S' = $4x - 3x = 'x'$ units/day

So Required number of days = $(144x/x) = 144$ days

Hence, option c.

33.C

Solution

Total number of freshers = $450 \times (5/9) = 250$

Total number of experienced people = $450 - 250 = 200$

So, number of fresher females = $250 \times (2/5) = 100$

So, number of experienced females = $200 \times (12/25) = 96$

So, required number of females = $100 + 96 = 196$

Hence, option c.

34.D

Solution

Let the profit share received by 'H' and 'J' be Rs. $12x$ and Rs. $25x$ respectively and the amount invested by 'H' and 'J' be Rs. $4y$ and Rs. $5y$ respectively.

So, time period for 'H' = $(12x/4y) = (3x/y)$

Or, time period for 'J' = $(25x/5y) = (5x/y)$

So, required ratio = $(3x/y) : (5x/y) = 3:5$

Hence, option d.

35.E

olution

The distance covered by the thief in 12 seconds = $24 \times 12 = 288$ metres

Relative speed of the policeman w.r.t thief = $32 - 24 = 8$ m/sec

So, required time = $(288/8) = 36$ seconds

Hence, option e.

36.B

Solution

For 'A',

Number of roses = 320

So, number of lilies = $320 \times 0.8 = 256$

So, number of irises = $256 \times (25/16) = 400$

So, total number of flowers = $(320 + 256 + 400) = 976$

Similarly,

Gardens	Number of roses	Number of lilies	Number of irises	Total number of flowers
A	320	256	400	976
B	400	300	500	1200
C	560	336	360	1256
D	480	432	288	1200
E	360	306	180	846

So, required ratio = $1256:976 = 157:122$

Hence, option b.

37.E

Solution

For 'A',

Number of roses = 320

So, number of lilies = $320 \times 0.8 = 256$

So, number of irises = $256 \times (25/16) = 400$

So, total number of flowers = $(320 + 256 + 400) = 976$

Similarly,

Gardens	Number of roses	Number of lilies	Number of irises	Total number of flowers
A	320	256	400	976
B	400	300	500	1200
C	560	336	360	1256
D	480	432	288	1200

E	360	306	180	846
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So, required difference = $300 - 288 = 12$
Hence, option e.

38.C

Solution

For 'A',

Number of roses = 320

So, number of lilies = $320 \times 0.8 = 256$

So, number of irises = $256 \times (25/16) = 400$

So, total number of flowers = $(320 + 256 + 400) = 976$

Similarly,

Gardens	Number of roses	Number of lilies	Number of irises	Total number of flowers
A	320	256	400	976
B	400	300	500	1200
C	560	336	360	1256
D	480	432	288	1200
E	360	306	180	846

Required average = $(336 + 432 + 306) / 3 = 358$

Hence, option d.

39.E

Required percentage = $\{(400 - 360) / 360\} \times 100 = 11\frac{1}{9}\%$ more
Hence, option e.

40.D

Required sum = $256 + 360 = 616$

Hence, option d.