# DI for SBI Clerk / PO Mains 2025

Directions (1-6): Read the following bar graph and table carefully and answer the questions given below. The bar graph shows the total (type A and type B) quantity (in kg) of ore extraction by two different companies (X and Y) in four different years. The table shows the percentage of A type ore extraction by company X and the quantity (in kg) of B type ore extraction by company Y in these years.
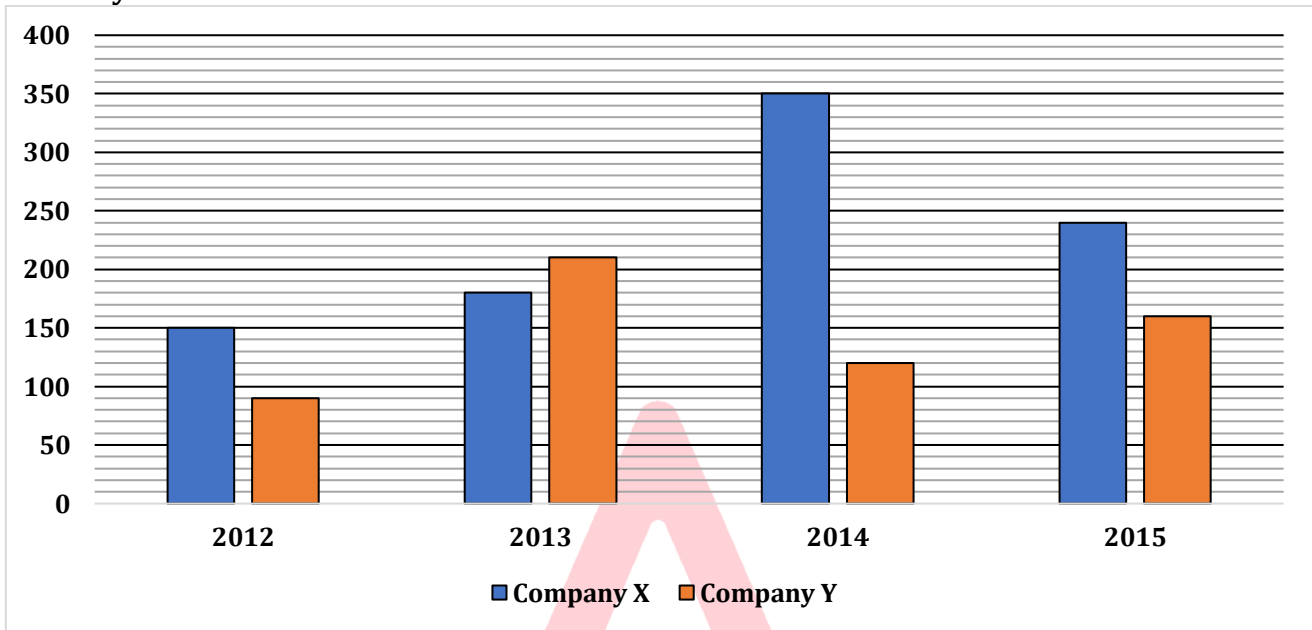
Years	Percentage of A type ore extraction by company X	Quantity (in kg) of B type ore extraction by company Y
2012	40%	30
2013	50%	135
2014	60%	75
2015	75%	90

Q1. Total quantity of A type ore extraction by Y in 2014 and 2012 together is what percentage of the total quantity of B type ore extraction by X in 2014 and 2015 together?
(a) 48.5%
(b) 60%
(c) 52.5%
(d) 25%
(e) 41.33%

Q2. Total quantity of A type ore extraction by Y in 2017 is 66 2/3% more than that in 2012. Total quantity of B type ore extraction by Y in 2017 half of the total quantity of A type ore extraction by X in 2015, then find the total quantity of ore extraction by Y in 2017 is how much more or less than the total quantity of ore extraction by X in 2012.
(a) 15 kg
(b) 10 kg
(c) 30 kg
(d) 25 kg
(e) 40 kg

Q3. B type ore extraction by company X in 2013 and 2011 is in the ratio of 18:13. If the A type ore extraction by company X in 2015 is 20% more than that in 2011, then find the ratio of the total quantity of ore extraction by company X in 2011 to total quantity of ore extraction by company Y in 2014.
(a) 43:22
(b) 42:25
(c) 41:29
(d) 43:24
(e) None of these

Q4. The average of the A type ore extraction by company X in 2012, 2013 and 2017 is 73. The total quantity of ore extraction by company X in 2017 is 1.5 times that of company Y in 2015. Find the B type ore extraction by company X in 2017.
(a) 171 kg
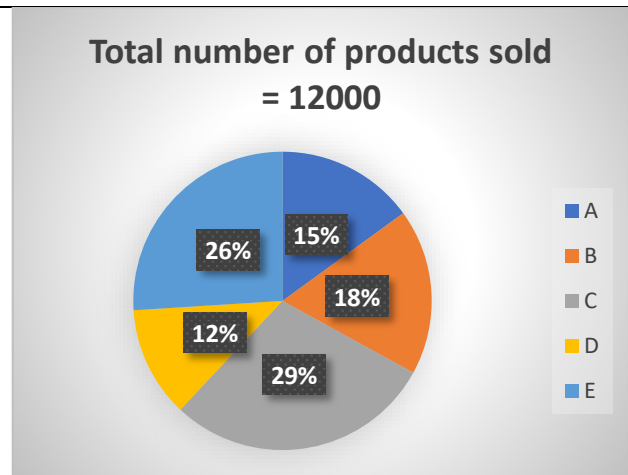(b) 184 kg
(c) 193 kg
(d) 111 kg
(e) 129 kg

Q5. Find the difference between the total B type ore extraction by company X in 2013 and 2015 together and the sum of the A type ore extraction by company X in 2012 and A type ore extraction by company Y in 2014.
(a) 50 kg
(b) 45 kg
(c) 30 kg
(d) 35 kg
(e) 20 kg

Q6. D type ore extraction by company X in 2016 is 25% more than the average of the A type ore extraction by company Y in 2012, 2013 and 2014. If the D type ore extraction by company Y in 2016 is two- fifth of the A type ore extraction by company X in 2013, then find the D type ore extraction by companies X and Y together in 2016.
(a) 150 kg
(b) 145 kg
(c) 130 kg
(d) 111 kg
(e) 120 kg

Directions (7-12): Read the following pie charts carefully and answer the questions given below. The pie chart I shows the percentage distribution of the total number of products manufactured, and the pie chart II shows the percentage distribution of the total number of products sold by five different companies in 2022.

Total number of products manufactured = 20000

A 20%
B 15%
C 25%
D 10%
E 30%

Legend: A, B, C, D, E

Total number of products sold = 12000

A 15%
B 18%
C 29%
D 12%
E 26%

Legend: A, B, C, D, E

Q7. Find the total number of unsold products of A, B and C together.
(a) 4560
(b) 3450
(c) 3645
(d) 4125
(e) None of these

Q8. The average number of products manufactured by B, D and F is 2500. If the total products sold by F is $33\frac{1}{3}\%$ that of A, then find the total number of unsold products by F.
(a) 1750
(b) 1900
(c) 1400
(d) 1550
(e) 1200

Q9. The total number of products manufactured by A in 2023 is increased by 37.5% compared to the previous year. If the total number of unsold products by A in 2023 is the same as 2022, then find the percentage increase in the number of products sold by A in 2023 compared to the previous year.
(a) 82.5%
(b) 66.67%
(c) 83.33%
(d) 33.33%
(e) 12.5%

Q10. Find the difference between the total number of products sold by D and E together and the total number of products unsold by C and A together.
(a) 620
(b) 540
(c) 840
(d) 775
(e) 590

Q11. The total number of products manufactured by X is 40% less than that by E and the ratio of the unsold products by X to B is 11:7 respectively. The number of products sold by X is what percentage of the number of products manufactured by C.
(a) 18.5%
(b) 12.33%
(c) 56.2%
(d) 32.8%
(e) 45.6%

Q12. 75% of the total number of products manufactured by E are non-defective, and the rest are defective. If $2/5^{th}$ of the defective products manufactured by E are unsold, then find the ratio of the total non-defective products sold to the total non-defective products unsold by E.
(a) 37:38
(b) 38:39
(c) 37:39
(d) 38:35
(e) 33:37

Directions (13–15): Read the information carefully and answer the questions given below.
The total number of sold flats in society A was 1.5x more than the number of unsold flats in the same society. All the flats were sold in society C, while the number of sold flats in society B are 42 which is $3/10^{th}$ of the total number of flats (sold + unsold) in society C. If we doubled the number of flats (sold + unsold) in society A, then the total number of flats (sold + unsold) in all three societies becomes 612. Total unsold flats in society B is 78.

Q13. If total unsold flats in society A are 61, then find the value of x?
(a) 54
(b) 36
(c) 115
(d) 72
(e) 48

Q14. Out of total unsold flats from society B, 28 were sold, then find the ratio of total unsold flats in society B now to total sold flats in society B now & C together?
(a) 7 : 21
(b) 4 : 21
(c) 5 : 18
(d) 5 : 21
(e) None of these

Q15. If total number of sold flats in society D are $1/4^{th}$ of total flats (sold + unsold) in society A, then find the difference between total sold flats in society in D and C?
(a) 100
(b) 104
(c) 106
(d) 86
(e) 96

Direction (16-20): Read the information and answer the following questions.

There are three people A, B and C bought the same article at different price. A bought an article at Rs. Y and B bought the same article at 50% more cost than that of A. C bought the same article at 100% above cost than that of A. The d% discount is given on the article by A also he gets a profit of Rs.40 and A marked up the article Rs. 100 above the cost price. The cost price of the article bought by B is five time the discount given by A on the article.

Q16. Find the value of d.
(a) 20%
(b) 18%
(c) 11%
(d) 15%
(e) 10%

Q17. Find the value of Y.
(a) Rs 200
(b) Rs 180
(c) Rs 125
(d) Rs 100
(e) Rs 150

Q18. If A invested 40 times of profit he received from the article in a scheme which offers a simple interest of 15% for 5 years, then find the interest received by A.
(a) Rs 1221
(b) Rs 1000
(c) Rs 1100
(d) Rs 1300
(e) Rs 1200

Q19. If C marked the article 30% above the cost price and gives a discount of Rs 49, then find the selling price of article A is how much more/less than the selling price of C.
(a) Rs 221
(b) Rs 181
(c) Rs 191
(d) Rs 231
(e) Rs 200

Q20. B gets the profit double than that of C on the article they bought. Now C and B get into a partnership by investing their profits that they get from the article they bought for X months and 12 months and received a profit share in the ratio of 1:6 respectively. Find the value of X.
(a) 3 months
(b) 6 months
(c) 10 months
(d) 4 months
(e) 5 months

Directions (21-26): Read the information carefully and answer the questions below.

There are three companies X, Y and Z. Total number of type A pencil manufactured is 40% less than total number of type B pencils manufactured by all three companies. The ratio of total number of type B pencils manufactured by Z to total number of type B pencil manufactured by all three companies is 3 : 10. The number of type A pencils manufacture by X is equal to total number of pencils manufactured by Y. The number of type A pencils manufactured by Z and Y are equal. Total number of pencils manufactured by X are half of the total number of pencils manufacture by all three companies together.

Note: Total pencils manufactured by any company = (type A + type B) pencils manufactured

Q21. If difference between total number of type B pencils manufactured by X and Y are 300, then find the sum of total number of type B pencils manufactured by Z and type A pencils manufactured by X.
(a) 2400
(b) 1900
(c) 1675
(d) 1050
(e) 2100

Q22. The average number of type B pencils manufactured by X and Z is 1050. If total number of pencils manufactured by N is 25% more than that of X, then find the difference between sum of type B pencil manufactured by Z and number of type A pencils manufactured by Y and total number of pencils manufactured by N.
(a) 1500
(b) 900
(c) 1600
(d) 1800
(e) 1200

Q23. Total number of pencils manufactured in M are equal four times of the total type A pencils manufactured by X and Z together. If difference between total pencils manufactured by M and total type B pencils manufactured by all three companies are 2000, then find total number of pencils manufactured by all three companies.
(a) 1200
(b) 1600
(c) 3200
(d) 3000
(e) 3600

Q24. Find the ratio of type B pencils manufactured by Y to total pencils manufactured by Z.
(a) 3:4
(b) 1:9
(c) 1:5
(d) 4:3
(e) 2:1

Q25. Type B pencils manufactured by all is A% of type A pencils manufactured by X. Find A.
(a) 240
(b) 250
(c) 175
(d) 105
(e) 210

Q26. If the difference between type B pencils manufactured by Y and type A pencils manufactured by Z is D, then D is what percentage of type B pencils manufactured by Z.
(a) 66.66
(b) 33.33
(c) 25
(d) CND
(e) None of these

Directions (27-31): The table given below shows the total number of utensils (Glass and Plats) sold by four shops, percentage of glasses sold and number of plats sold by these four shops (A, B, C and D). Some values are missing in the tables, which you have to calculate if required. Read the table carefully and answer the questions.

Shops	Total utensils (Glass and Plats) sold	Percentage of glass sold	Number of plats sold
A	968	50%	
B		65%	
C		44%	504
D	900		

Q27. In shop D, the percentage range of number of glasses sold within 8 <X< 30 and X is an odd place multiple of 8. Find the number of plats sold by shop D?
(a) 684
(b) 620
(c) 630
(d) 636
(e) 624

Q28. The number of plats sold by B is 146 more than three times of the difference between total number of utensils (Glass and Plats) sold by A and D. Find the sum of total number of utensils (Glass and Plats) sold by C and the number of glasses sold by B?
(a) 1518
(b) 1520
(c) 1530
(d) 1536
(e) 1550

Q29. If the total number utensils (Glass and Plats) sold in Y is 200% more than the number of glasses sold by A and the number of plats sold by Y is 3/4th of the total number of utensils (Glass and Plats) sold by the shop, then find the sum of total number of glasses sold by Y and C together?
(a) 829
(b) 719
(c) 789
(d) 759
(e) 729

Q30. If the total number glasses sold by B is 414 less than the average number of total number of utensils (Glass and Plats) sold by A and D, then find total number of plats sold by shop B?
(a) 180
(b) 200
(c) 300
(d) 280
(e) 240

Q31. If the average of total number of utensils (Glass and Plats) sold by all four shops is 822, then find the number plats sold by shop B?
(a) 186
(b) 180
(c) 188
(d) 196
(e) 182

Directions (32-36): The bar graph given below shows percentage of people (male +female) not attended the seminar out of the total people in the city and percentage of male attended the seminar out of the total people attended the seminar from four different (A, B, C and D) cities. Read the graph carefully and answer the questions.
Note: Total people in a city = People (male + female) attending the seminar + people (male + females) not attending the seminar.
People attending/not attending the seminar = males + females
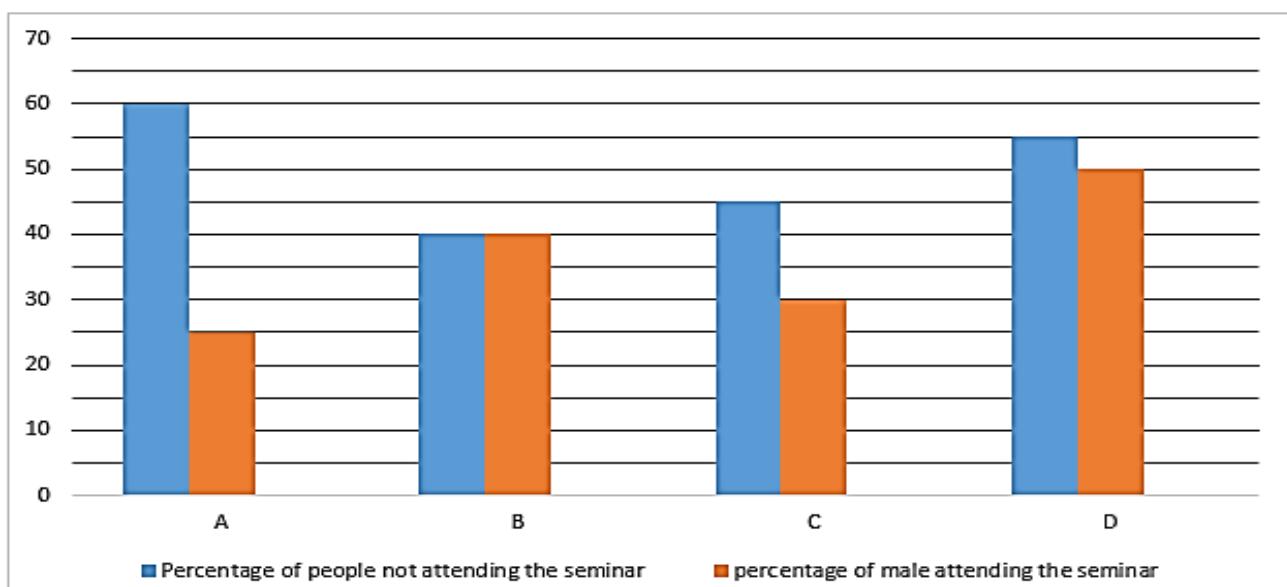
Q32. Total females attending the seminar from A is 1800 and total males not attending the seminar from B is 600. If the ratio of total males not attending the seminar from B to total people not attending the seminar from B is 3 : 10, then find total people in A are what percent more than total people in B.
(a) 5%
(b) 30%
(c) 15%
(d) 20%
(e) 10%

Q33. The ratio of total males not attending the seminar from B to people not attending the seminar from B is 2 : 5. Total females attending the seminar from B is 2880 and total females not attending the seminar from C are 384 more than total males attending the seminar from same city. If total females not attending the seminar from C is 42% less than people not attended the seminar from C, then find the difference between males not attended the seminar from company B and C.
(a) 524
(b) 512
(c) $(8^3 + 12)$
(d) Both (a) and (c)
(e) 564

Q34. If females attended the seminar from D is 2250 and the ratio of total females not attended the seminar to total males not attended the seminar is 7 : 3, then find difference between total females not attended the seminar and total males not attended the seminar from D.
(a) 1100
(b) 2000
(c) 2200
(d) 1800
(e) 2400

Q35. If difference between total male and females attended the seminar from A is 1200 and total females attended the seminar from D is 2700, then find the ratio of total people not attended the seminar from D to total number of people in A.
(a) 11 : 9
(b) 11 : 10
(c) 11 : 8
(d) 11 : 7
(e) 13 : 11

Q36. If the ratio of total people in A to that in C is 2 : 3 and difference between total females attending the seminar from both cities is 4440, then find average number of males attending the seminar from both the cites.
(a) 2980
(b) 2180
(c) 2780
(d) 2280
(e) 2580

Directions (37-42): Read the following table carefully and answer the questions given below. The table shows the total number of cars manufactured, the total number of cars sold, and the total number of cars unsold by four companies.

Companies	Total cars manufactured	Total cars sold	Total cars unsold
A	P	Z	----
B	P+150	$8\frac{4}{7}X$	----
C	900	648	3X
D	----	2Z+132	$\frac{P}{3}+150$

Note: (i) Total cars unsold by D is $1/3^{rd}$ of the total cars sold by the company.
(ii) Total cars sold by all the companies are 3552.

Q37. Total number of cars manufactured by E is P/25 % more than that of C. If the total number of cars unsold by E is 5Z/9, then find the total number of cars sold by E.
(a) P - 6^2
(b) Z + 214
(c) X + 8^3
(d) (P+X)/5
(e) (P-Z+X)÷3

Q38. The total number of non-defective cars sold by B is X/4+39 and the remaining are defective cars sold. If the total number of defective cars sold by D are double that of B, then find which of the following statement/s is/are true.
I. The difference between the total number of non-defective cars sold by B and D is 120.
II. The total number of defective cars sold by D is more than the total number of cars unsold by A.
III. The total number of defective cars sold by B is less than total number of cars manufactured by C.
(a) Only I
(b) Only III
(c) Both I & III
(d) Both I & II
(e) All I, II & III

Q39. $(\frac{Z}{4}+\frac{X}{6})$ of the total number of cars manufactured by A are SUV and rest are hatchback. The total number of SUV sold cars by A is P/15. Find which of the following statement/s is/are false.
I. Total number of SUV cars unsold by A < Total number of hatchback cars sold by A
II. Total number of hatchback cars manufactured by A > Total number of cars manufactured by C.
III. Total number of SUV cars unsold by A = Total number of cars sold by D
(a) Both II & III
(b) Both I & III
(c) Both I & II
(d) None
(e) Only II

Q40. The total number of cars sold by F is $(7X+Z+12)/2$ and the total number of cars unsold by F is 2P. Find which of the following option is correct about the difference between the total cars manufactured by F and A & C together.
(a) $5P/3$
(b) $2(P-X)$
(c) $(X+Z)/3$
(d) $X+146$
(e) $P-258$

Q41. If the average of the number of unsold cars by A, C and B is Y and the average of the number of cars manufactured by C and D is 5Q, then find which of the following statement/s is/are true.
**I.** $P-Z < Q$
II. $Y+X > P$
III. $Y-Q = X-8$
(a) only III
(b) Only II
(c) Both I & II
(d) Both I & III
(e) All I, II & III

Q42. Total number of cars unsold by A and B together is what percentage more or less than the total number of cars sold by D.
(a) $(2X-P/25)\%$
(b) $(P-1.5Z)\%$
(c) $((P+X)/50)\%$
(d) $(X/2+1.6)\%$
(e) None of these

Directions (43-48): Read the following bar graph and line chart carefully and answer the questions given below. The bar graph shows total number of balls (Red, Green and Blue) in four different bags. The line graph shows the probability of picking a red ball from bag A and C and the probability of picking green ball from bag B and D each.

Legend: ■ Total number of balls (Red, Green and Blue)

The graph shows the following data points:
- Probability of picking red ball from bag A: 0.5
- Probability of picking green ball from bag B: 0.4
- Probability of picking red ball from bag C: 0.2
- Probability of picking green ball from bag D: 0.6
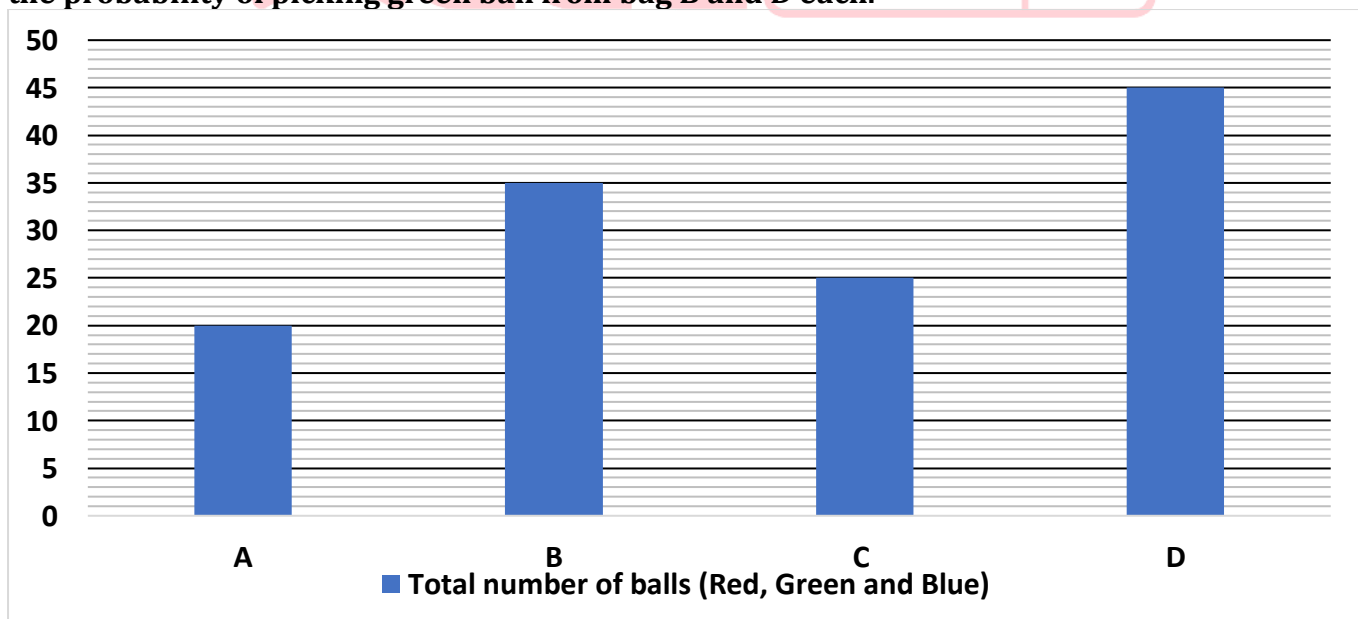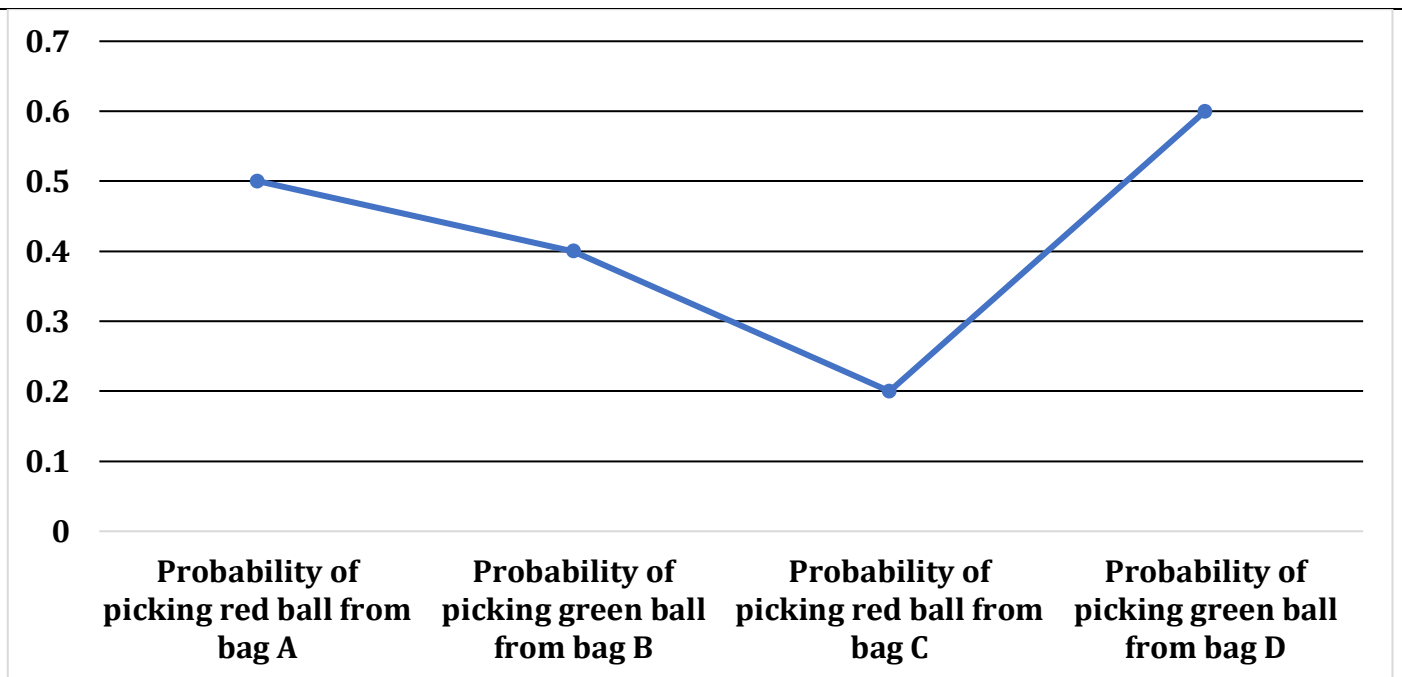
Q43. If the number of red balls increased by **30%** in bag A and the number of green balls in bag A is 1/7th of the bag B, then the number of **blue balls** in bags A and C are equal. Find which of the following statement/s is/are true.

I. The difference between the probability of picking a red ball from bag A and the probability of picking a blue ball from bag B is 0.1.

II. The difference between the number of green balls in bags B and D is 13.

III. The average number of red balls in bags A and C is 9.

(a) Both (I) & (III)
(b) Both (II) & (III)
(c) Both (I) & (III)
(d) Only (I)
(e) Only (II)

Q44. If the number of blue balls in bag C is more than 8 and the number of blue balls in bag C is more than the number of green balls in that bag. The number of green balls in bag C is a prime number. Which of the following statement/s is/are correct.

I. The total number of red and blue balls in bag D can be equal to the number of blue balls in bag C.

II. The probability of picking a blue ball form bag C is less than 0.75.

III. The sum of probability of picking a green ball from bag B and the probability of picking a blue ball from bag C is always greater than one.

(a) Both (II) & (III)
(b) Only (I)
(c) All (I), (II) & (III)
(d) Only (II)
(e) Both (I) & (II)

Q45. The total number of balls in bag E is 25 and the probability of picking a blue ball in bag E is 0.2. The number of red balls in bag D is three times of the number of blue balls in bag E. Find which of the statement/s is/are correct.

I. The difference between the blue balls in bag E and red balls in bag D is 9.

II. The probability of picking blue ball in bag D in less than 1/15.

III. The probability of picking two red balls from bag D is 7/66.

(a) Only I

(b) Both I & II

(c) Both II & III

(d) Only III

(e) None of these

Q46. The number of green balls in C is one-third that in D. If the two balls picked from bag C, then find the probability of blue ball.

(a) 11/60

(b) 13/60

(c) 7/60

(d) 19/60

(e) 23/60

Q47. If average number of red balls in bag D and C is 8, then find which of the statement/s is/are correct.

I. The number of blue balls in bag D is more than red ball in bag A.

II. The number of red balls in bag D is less than that in bag A.

III. The number of green balls in bag B is twice the red balls in bag D.

(a) Only I

(b) Both I & II

(c) None

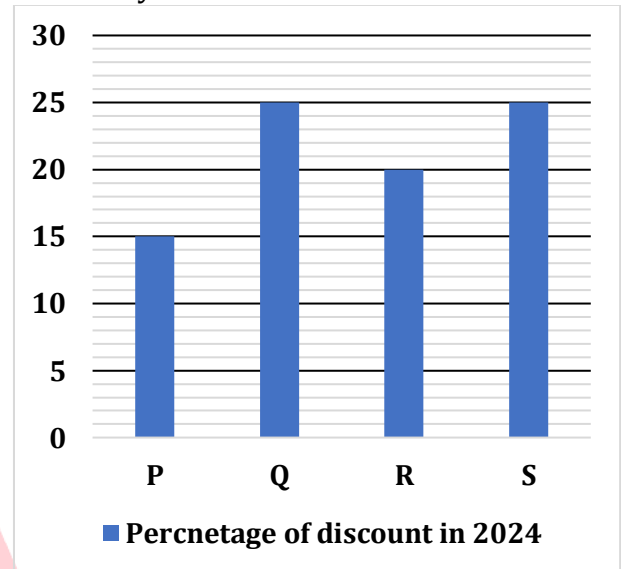(d) Only III

(e) None of these

Q48. The number of blue balls in bag A is 5 less than the difference between the number of green balls in bags B and D. If the average number of green balls in all four bags is 12, then the difference between the number of blue balls in bag C and the number of green balls in bag A is 'P'. Which of the following option is correct about 'P'.

(a) P is multiple of 11

(b) P is a prime number

(c) Both (b) & (d)

(d) 65 is completely divisible by P

(e) Both (a) & (b)

Directions (49-53): Read the following bar graphs carefully and answer the questions given below. The bar graphs shows discount percentage given on marked price of four different items in 2022 and 2024.

Note: (i) The marked price of an item can be same or different in both years.

(ii) The cost price of an item can be same or different in both the years.

Legend (left graph): ■ Percnetage of discount in 2022

Legend (right graph): ■ Percnetage of discount in 2024
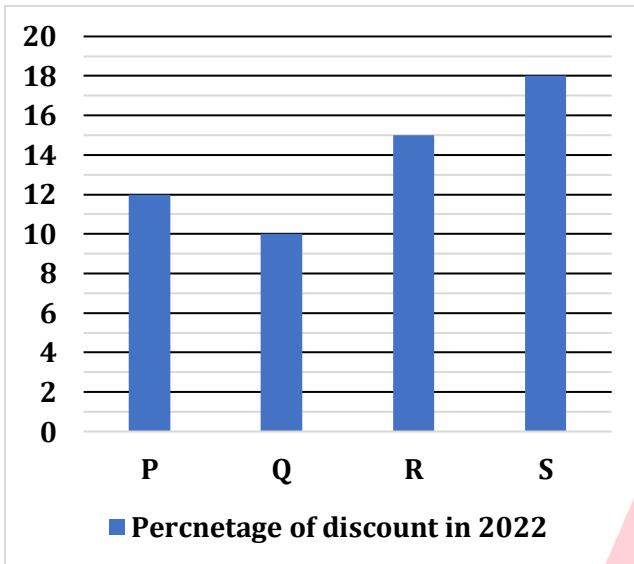
Q49. The marked price of item S in 2022 is Rs 836 more than the profit earned by selling this item in 2022, whereas the profit percentage in selling item S in 2022 is 25%. Then find the marked price of item D in 2022.
(a) Rs 1000
(b) Rs 800
(c) Rs 450
(d) Rs 550
(e) Rs 1200
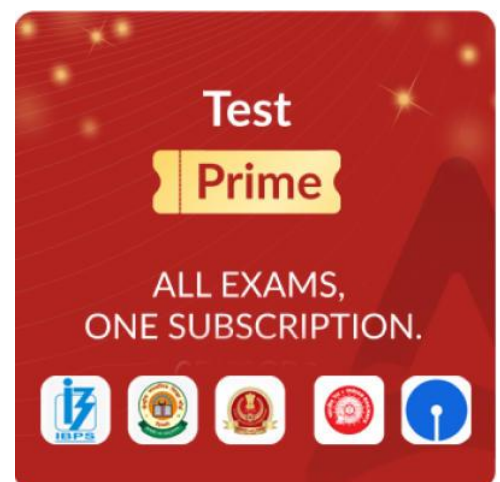
Q50. If the marked price of Q is twice the marked price of P in 2022, then find the ratio of the selling prices of P and Q in 2022.
(a) 43:90
(b) 41:90
(c) 44:89
(d) 42:89
(e) 41:91

Q51. The ratio of the selling price of items R and S in 2024 is 2:5 and the profit on selling items R and S in 2024 is 20% and 25% respectively. Find the cost price of item R is what percentage of the cost price of item S in 2024.
(a) 43.33%
(b) 49.25%
(c) 42.83%
(d) 44.5%
(e) 41.67%

Q52. The ratio of the marked price of Q and R in 2024 is 3:4, and item R is sold at a profit of 60%, and the difference between the cost price and the selling price of R in 2024 is Rs 960. If the marked price of Q in 2022 and 2024 is same, then find the selling price of Q in 2022.
(a) Rs 2160
(b) Rs 2240
(c) Rs 2040
(d) Rs 2350
(e) Rs 2550

Q53. If the cost price of P in 2022 and 2024 is equal, then find the ratio of selling price of A in 2022 to 2024.
(a) Rs 160
(b) Can't be determined
(c) Rs 240
(d) Rs 350
(e) None of these

Directions (54-57): Read the following pie chart and table carefully and answer the questions given below. The pie chart shows the percentage and degree distribution of the total number of students in four different institutions that provide skill development courses. The table shows the given institutions provide training for students to another institution.
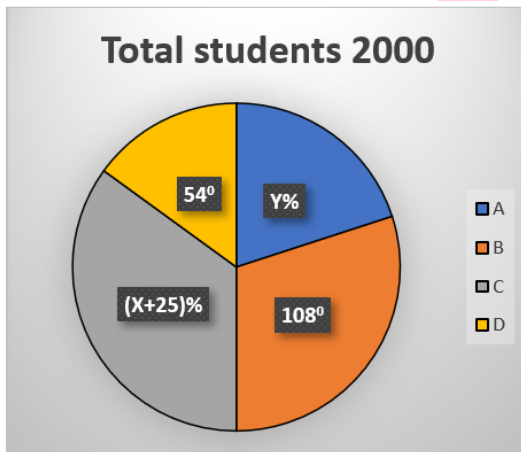
institutions	Provide training
A	Only B
B	Both C and D
C	Only A
D	Only C

Note: Institution B provide training to 1000 students.

Q54. If the total number of students in E is (Y+5)% more than that of B and out of total students in E 4X% is number of girls, then find which of the statement/s is/are correct.
I. The number of students in E > D provides training to students.
II. The number of boys in E < A provides training to students.
III. The number of girls in E = C provides training to students
(a) Only III
(b) Only I
(c) Both II & III
(d) Both I & III
(e) Both I & II

Q55. If the difference between the C provides training to students and total number of students in D is Z, then find which of the following option is correct about Z.
(a) X^2
(b) Y^2
(c) $(Y-X)^2$
(d) Y/X
(e) Both (a) & (c)

Q56. If A provides training to only C's students and B provide training to only D's students, then, the average number of students provides training by A and B is P, then find which of the statement/s is/are incorrect.
I. P is completely divisible by 5^2
II. P > X×Y
III. P/ X = 2.5Y
(a) Only III
(b) Only I
(c) Only II
(d) Both I & II
(e) Both II & III

Q57. If the total number of students in F is Y/5 times of the number of students provide training by C and the A provides training to F's students, then find the ratio of the total number of students provides training by A and B.
(a) 5:11
(b) 11:5
(c) 6:11
(d) 4:11
(e) 11:9

Directions (58-60): There are three bakeries: A, B, and C. They all bake and sell cakes, total number of cakes baked by them was 126. A bakes more cakes than B, and C bakes more cakes than B. The difference between cakes baked by A and B together is doubled than the difference between cakes baked by B and C. A and B sold 41 and 29 cakes, respectively. The number of cakes baked by A and C is in the ratio of 8:7. Unsold cakes of A and C were the same.

Q58. Find the unsold cakes of C.
(a) 7
(b) 18
(c) 14
(d) 21
(e) 3

Q59. Cakes sold by A is approximately what percentage of cakes baked by C.
(a) 88%
(b) 17%
(c) 57%
(d) 98%
(e) 38%

Q60. 20% of cakes sold by C are chocolate cakes, then find the difference between total chocolate cakes sold by C and unsold cakes of bakery B.
(a) 2
(b) 8
(c) 1
(d) 9
(e) 0

Direction (61-65): Read the data and answer the following questions. The table shows the difference between books published online and offline by four publishers (A, B, C, and D), and it also shows the percentage of books published offline out of total books published by each publisher.

Publishers	Online – Offline	Percentage of book published offline
A	210	20
B	224	10
C	0	----
D	84	30

Note – Books published = Online + Offline

Q61. The total number of books published by C was double than that of books published by D. Find the difference between online books published by C and offline books published by A.
(a) 135
(b) 140
(c) 120
(d) 110
(e) 130

Q62. If the average number of offline books published by B, C and D is 112, then find the ratio of online books published by C to average number of offline books published by A and B.
(a) 2:1
(b) 8:1
(c) 1:4
(d) 5:1
(e) 1:1

Q63. Publisher F, published 20% more books than that of B and the average number of books published by A and D is equal to offline books published by F. find the difference between online and offline books published by F.
(a) 212
(b) 224
(c) 221
(d) 225
(e) 220

Q64. Books published by A is what percentage of books published by B offline.
(a) 1275
(b) 1250
(c) 1220
(d) 1200
(e) 1000

Q65. Find the difference between books published online and books published offline by all the publishers.
(a) 518
(b) 218
(c) 911
(d) CND
(e) None of these

Directions (66-70): Read the following table carefully and answer the questions given below. The table shows the ratio between the production of items on Monday and on Tuesday by five different companies. The table also shows the difference between the total production of items on Monday and Tuesday by these companies.

Companies	Ratio of production of items on Monday and on Tuesday	Difference between the total production of items on Monday and Tuesday
A	16:13	150
B	5:4	190
C	11:9	120
D	4:3	250
E	4:5	100

Q66. Find the ratio between the total production of items on Monday by A to the total production of items on Tuesday by D.
(a) 13:17
(b) 11:12
(c) 16:19
(d) 16:15
(e) 13:15

Q67. Total production of items on Tuesday by E is what percentage of the total production of items on Monday by D?

(a) 75%

(b) 100%

(c) 50%

(d) 25%

(e) 125%

Q68. Total production of items on Monday by B and C together is how many more or less than the total production of items on Tuesday by D and E together.

(a) 400

(b) 380

(c) 360

(d) 440

(e) 310

Q69. Total production of items on Monday by F is 20% more than the total production of items on Tuesday by A. If the ratio of the total production on items on Monday and Tuesday together by F to D is 17:25, then find the total production on items on Tuesday by F.

(a) 400

(b) 440

(c) 430

(d) 420

(e) 410

Q70. Average of the production of items on Monday and Tuesday by B is what percentage is more or less than the total production of items on Tuesday by E.

(a) 67%

(b) 71%

(c) 69%

(d) 73%

(e) 78%

Directions (71-75): The bar graph shows the total number of male employees in four different companies. The table shows the ratio of the sum of male employees and female employees to the difference between the male employees and female employees in these companies.

Note: Total employees = Male employees + female employees.
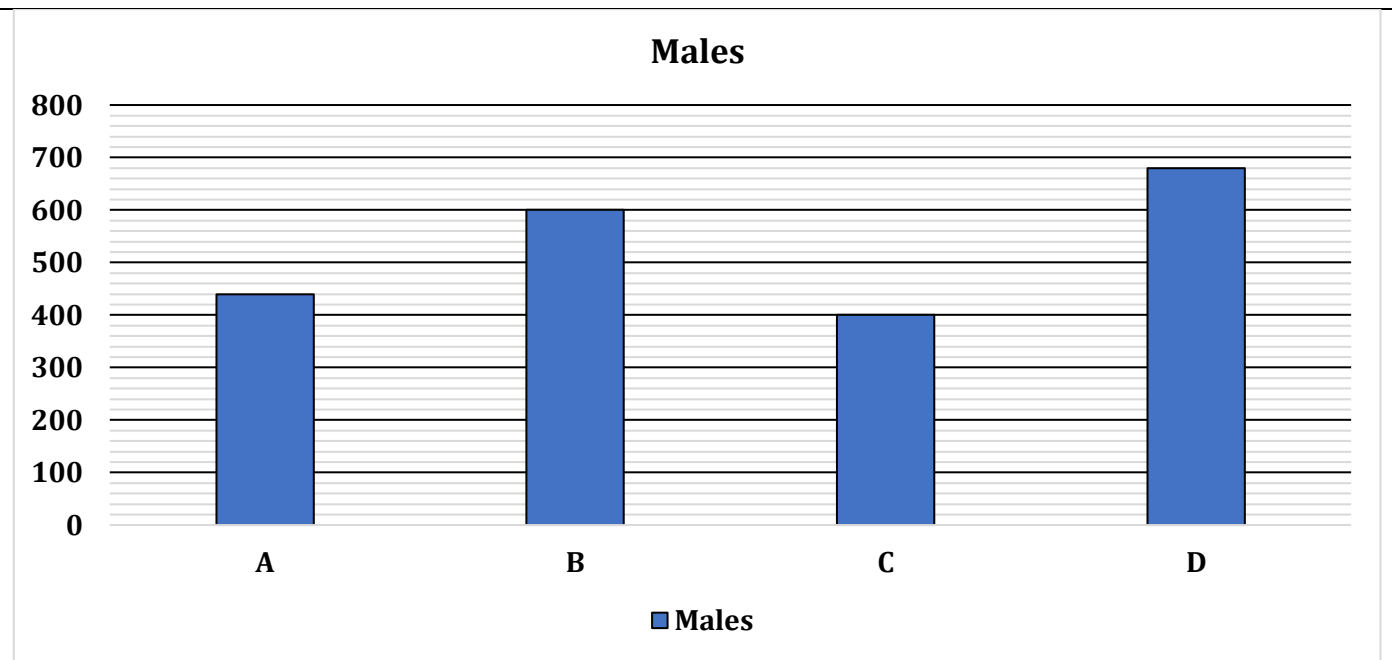
Males

Companies	(Male + females) : (males – females)
A	9:2
B	13:2
C	17:3
D	11:6

Q71. Find the ratio of the total female employees in C and A together to the total employees in B.
(a) 11:19
(b) 17:15
(c) 11:17
(d) 11:13
(e) 7:13

Q72. Total female employees in B is what percentage more or less than the total male employees in A?
(a) 100%
(b) 19%
(c) 28%
(d) 0%
(e) None of these

Q73. If the total employees in X are 66.67% more than that in A and the total male employees in E are 5/13 of the total employees in B and female employees in X is equal to male employees in E, find the difference between male and female employees in X.
(a) 400
(b) 200
(c) 100
(d) 500
(e) 600

Q74. Total male employees in F are X+25 which is equal average number of female employees in B and D. Total female employees in F is 25% of the total male employees in D. Find the difference between X and total employees in F.
(a) 135
(b) 110
(c) 140
(d) 150
(e) 195

Q75. The difference between average number of female employees and male employees in all four companies is X, then find which of the following option is correct.
(a) When X is divided by 10, the result is a prime number.
(b) X > 305
(c) X is divisible by 5
(d) X < 230
(e) Both (a) & (c)

Directions (76-80): Read the following pie chart and table carefully and answer the questions given below. The pie chart shows the percentage distribution of total number of unsold toys (metallic and plastic) by four (A, B, C and D) different companies. The table shows the difference between the metallic and plastic toys sold by these four companies.
Note: (i) Total toys (metallic and plastic) manufactured by A, B, C and D are 40, 33, 25, and 38 respectively.
(ii) Metallic sold are more than plastic toys sold by each company.
(iii) Total toys manufactured = Total toys (metallic and plastic) sold + total toys unsold (metallic and plastic)
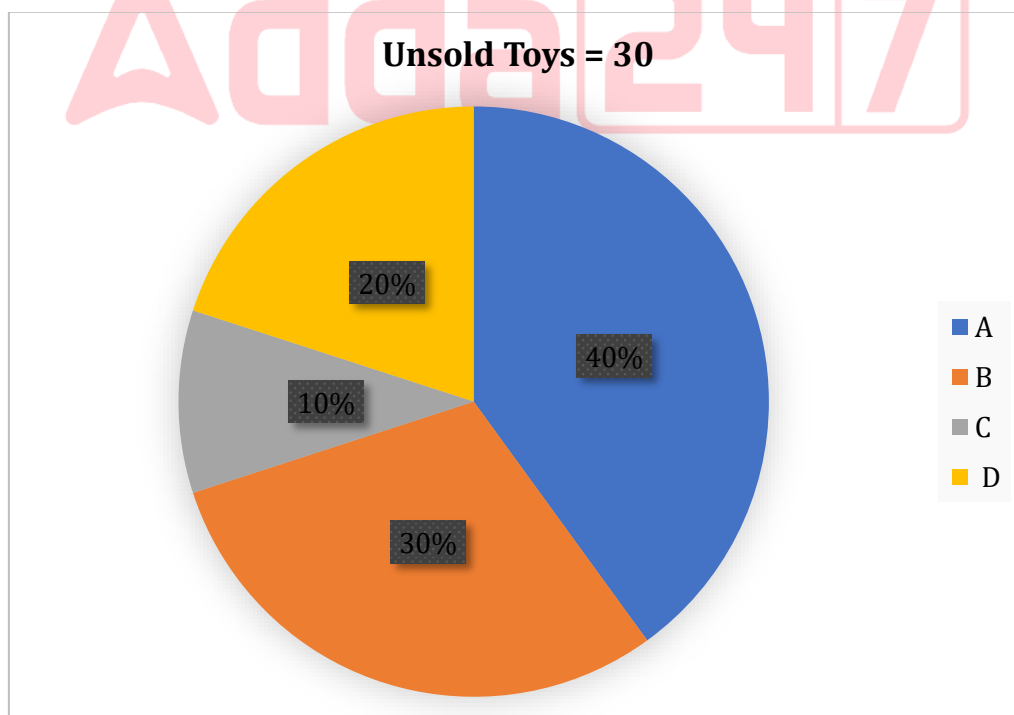
Unsold Toys = 30

Companies	Difference between the metallic and plastic toys sold
A	2
B	12
C	3
D	5

Q76. Find the difference between the total number of metallic toys sold by A and C together and the total number of unsold toys by B and D together.
(a) 11
(b) 14
(c) 12
(d) 15
(e) 18

Q77. The total number of toys manufactured by E is 40% more than that of C and the total toys sold by E is half of the total toys sold by C and D together. The total unsold toys by E is what percentage more or less than the total plastic toys sold by C?
(a) 5%
(b) 10%
(c) 1.5%
(d) 2.5%
(e) 0%

Q78. Total number of unsold metallic toys by D is 10% of the total number of metallic toys sold by same company. Find the difference between the total number of plastic toys (sold and unsold) manufactured by D and the total number of toys sold by A.
(a) 12
(b) 11
(c) 10
(d) 14
(e) 13

Q79. Find the ratio of the total number of plastic toys sold by A and D together to the total number of toys unsold C and B together.
(a) 29:12
(b) 28:15
(c) 27:11
(d) 23:19
(e) 21:17

Q80. The average number of toys sold by C and the plastic toys sold by A is what percentage of the total metallic toys sold by D?
(a) 50%
(b) 75%
(c) 80%
(d) 66.67%
(e) None of these

Directions (81-84): Read the following table carefully and answer the questions given below. The table shows the ratio of the number of pens to the number of sharpeners in three boxes and the difference between the probability of picking a pen and the probability of picking an eraser in these boxes. The table also shows the total number of sharpeners and erasers in these boxes.

Boxes	Pens: Sharpeners	Difference between the probability of picking a pen and the probability of picking an eraser	Total number of sharpeners and erasers
A	4:3	2/9	10
B	3:4	3/17	11
C	3:2	1/11	13

Note: Number of pens in each box is more than the number of erasers.

Q81. Find the ratio between the total number of erasers in C and B together to the number of pens in A.
(a) 1:3
(b) 4:5
(c) 5:4
(d) 3:2
(e) 5:3

Q82. The number of sharpeners in A is P times that of erasers, and the number of pens in B is Q times that of erasers. Find which of the following statement/s is/are correct.
I. P > Q
II. 4P = 3Q
III. Q : P = 4 : 3
(a) Both I & II
(b) All I, II & III
(c) Only II
(d) Both II & III
(e) Only I

Q83. Find the total number of sharpeners in all the boxes together.
(a) 22
(b) 14
(c) 18
(d) 15
(e) 20

Q84. If the average number of pens, sharpeners and erasers in A is X, then find which of the option is correct about X.
(a) X is an even number
(b) X is a perfect number
(c) Both (a) & (b)
(d) X > 8
(e) X is an odd number

Directions (85-90): Read the following bar graph carefully and answer the questions given below. The bar graph shows the total number of people who votes in two different years in four different cities.
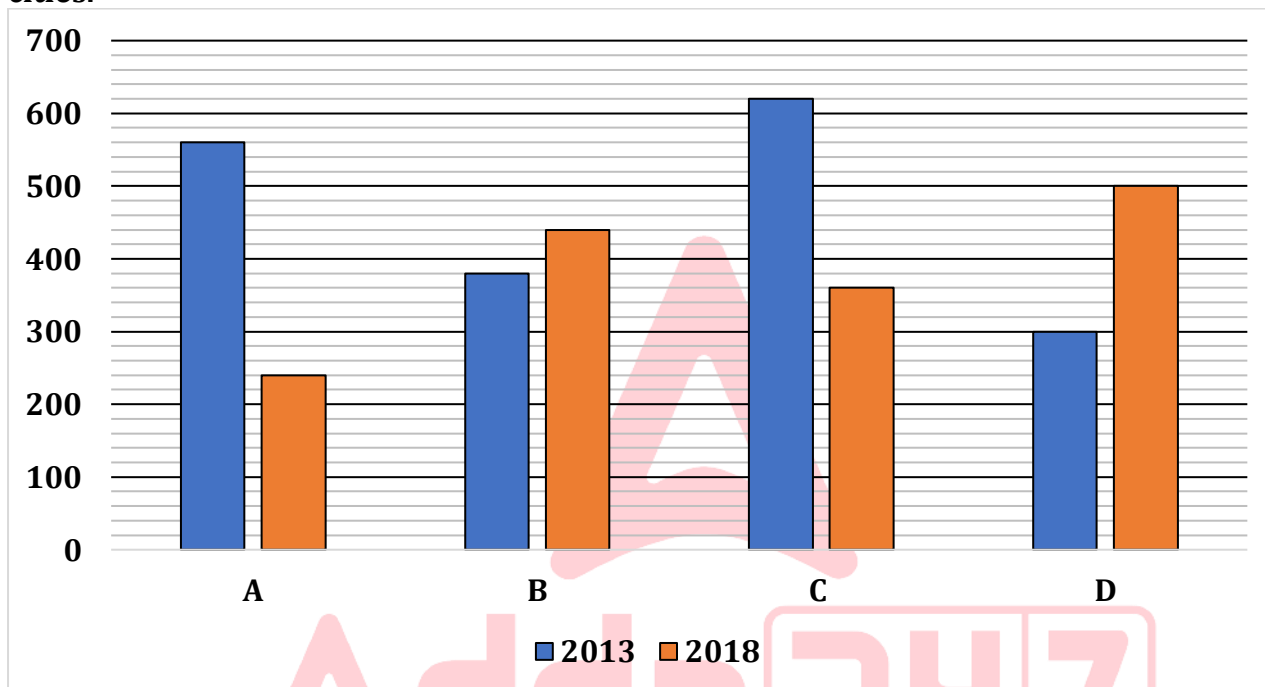
Q85. In 2013, 20% of the total number of people who vote in city C were invalid, and the ratio of total invalid votes in city D to city C was 7:4, respectively. Find the difference between the total number of people who vote in cities C and D which are valid votes.
(a) 456
(b) 452
(c) 432
(d) 413
(e) 409

Q86. In 2018, the ratio of total males to total females who vote in city A was 5:7, respectively. 3/8ᵗʰ of the total number of people who vote in city A were invalid. If the total number of females valid votes is 50% of the total number of valid votes, then find the difference between the total number of male valid and invalid votes in city A.
(a) 50
(b) 25
(c) 75
(d) 10
(e) 80

Q87. If the difference between the total number of people who vote in city B in 2018 and the total number of people who vote in 2013 in city D is X, then find which of the following statement/s is/are correct about X.

I. X > 120

II. X < 150

III. X = Total number of people who votes in city A in 2018

(a) Both I & III

(b) All I, II & III

(c) Both I & II

(d) Only I

(e) None

Q88. The total number of people who vote in city E in 2013 was 25% more than the average number of people who votes in cities C and A in 2018. If 66.67% of the total number of people who vote in city E in 2013 are valid, then find the total number of invalid votes in city E in 2013.

(a) 135

(b) 120

(c) 125

(d) 150

(e) 105

Q89. The total number of people who vote in city A in 2020 is $3/5^{th}$ of the total number of people who votes in 2013 in city D. If the ratio of males to females who vote in city A in 2020 is 5:4, respectively, then the total number of females who vote in city A in 2020 is what percentage of the total number of people who vote in 2018 in city D?

(a) 15%

(b) 12%

(c) 20%

(d) 24%

(e) 16%

Q90. Find the ratio of the difference between the total number of people who votes in cities D and A in 2013 and the average number of people who votes in cities in B and C in 2018.

(a) 11:19

(b) 13:20

(c) 12:23

(d) 17:21

(e) 10:17

Directions (91-92): Read the following information carefully and answer the questions given below.

The average of total items manufactured in 2021 and 2022 by A, B, and C is 1500 and 1650, respectively. 20% and $1/5^{th}$ of the total items manufactured in 2021 and 2022, respectively, by B. Total items manufactured by C in 2021 are 33.33% more than that of B, and the total items manufactured by A in both years are 4000.

Q91. Find the difference between the total items manufactured by C in both years and the total items manufactured by A in 2022.
(a) 1960
(b) 2340
(c) 1450
(d) 1880
(e) 1920

Q92. Total items manufactured by B in 2022 is what percentage of the total items manufactured by C in 2021?
(a) 77.5%
(b) 82.5%
(c) 87.5%
(d) 66.67%
(e) 62.5%

Directions (93-97): Read the following information carefully and answer the questions given below. The information about a company conducted interviews over three consecutive days i.e. Monday, Tuesday, and Wednesday for various role.
Total candidates (males and females) interviewed on these three days are 420. The ratio of male candidates interviewed on Monday to the female candidates interviewed on Tuesday is 4:3, and the female candidates interviewed on Monday are 10 less than that on Tuesday. Total candidates (males and females) interviewed on Tuesday are 190, and male candidates interviewed on Wednesday are 20% more than the female candidates interviewed on Monday. The average number of male candidates interviewed on Monday is 90.

Q93. Find the ratio of the total female candidates interviewed on Wednesday to the total male candidates interviewed on Monday.
(a) 4:1
(b) 3:4
(c) 1:3
(d) 2:1
(e) 1:2

Q94. Total female candidates interviewed on Tuesday is what percentage more or less than the total candidates (males and females) interviewed on Wednesday?
(a) 25%
(b) 32.5%
(c) 40%
(d) 66.67%
(e) 33.33%

Q95. Find the difference between the male candidates interviewed on Wednesday and the female candidates interviewed on Monday.
(a) 8
(b) 5
(c) 14
(d) 10
(e) 25

Q96. 20% of the total male candidates interviewed on Tuesday are rejected and 35% of the female candidates interviewed on Tuesday are selected, then find the total candidates (males and females) who are selected on Tuesday.
(a) 145
(b) 110
(c) 125
(d) 130
(e) 100

Q97. Total candidates (males and females) interviewed on Monday is how many more or less than the total female candidate interviewed on all three days.
(a) 15
(b) 10
(c) 20
(d) 30
(e) 40

Solutions

Solutions (1-6): In 2012

Ore extraction by X = 150 kg

A type ore extraction by X = $150 \times \frac{40}{100} = 60$ kg

B type ore extraction by X = 150 – 60 = 90 kg

Ore extraction by Y = 90 kg

A type ore extraction by Y = 90-30 = 60 kg

B type ore extraction by Y = 30 kg

Similarly,

Years	A type ore extraction by company X (in kg)	B type ore extraction by company X (in kg)	A type ore extraction by company Y (in kg)	B type ore extraction by company Y (in kg)
2012	60	90	60	30
2013	90	90	75	135
2014	210	140	45	75
2015	180	60	70	90

S1. Ans.(c)
Sol. Total quantity of A type ore extraction by Y in 2014 and 2012 together
= 60 + 45 = 105 kg
Total quantity of B type ore extraction by X in 2014 and 2015 together
= 140 +60 = 200 kg
Required percentage = $\frac{105}{200} \times 100 = 52.5\%$

S2. Ans.(e)
Sol. Total quantity of A type ore extraction by Y in 2017 = $\frac{5}{3} \times 60 = 100$ kg

Total quantity of B type ore extraction by Y in 2017 = $\frac{1}{2} \times 180 = 90$ kg

Total quantity of ore extraction by Y in 2017 = 100 + 90 = 190 kg
Required difference = 190 -150 = 40 kg

S3. Ans.(d)
Sol. B type ore extraction by company X in 2011 = $\frac{90}{18} \times 13 = 65$ kg

A type ore extraction by company X in 2011 = $\frac{180}{120} \times 100 = 150$ kg

Total quantity of ore extraction by company X in 2011 = 65 + 150 = 215 kg
Required ratio = 215 : 120 = 43 : 24

S4. Ans.(a)
Sol. A type ore extraction by company X in 2017 = $73 \times 3 - (60+90) = 69$ kg
Total quantity of ore extraction by company X in 2017 = $1.5 \times 160 = 240$ kg
B type ore extraction by company X in 2017 = 240 – 69 = 171 kg

S5. Ans.(b)
Sol. B type ore extraction by company X in 2013 and 2015 together = 90 + 60 =150
A type ore extraction by company X in 2012 and A type ore extraction by company Y in 2014 = 60 + 45 = 105
Required difference = 150 -105 = 45 kg

S6. Ans.(d)
Sol. D type ore extraction by company X in 2016 = $\frac{5}{4} \times \frac{60+75+45}{3} = 75$ kg

D type ore extraction by company Y in 2016 = $\frac{2}{5} \times 90 = 36$ kg

Required sum = 75 + 36 =111 kg

Solutions (7-12):
Total number of products manufactured by A = $20000 \times \frac{20}{100} = 4000$

Total number of products sold by A = $\frac{15}{100} \times 12000 = 1800$

Total number of unsold products by A = 4000 – 1800 = 2200
Similarly

Companies	Total number of products manufactured	Total number of products sold	Total number of unsold products
A	4000	1800	2200
B	3000	2160	840
C	5000	3480	1520
D	2000	1440	560
E	6000	3120	2880

S7. Ans.(a)
Sol. Required answer = 2200 + 840 + 1520 = 4560

S8. Ans.(b)
Sol. Total products manufactured by F = $2500 \times 3 - (3000 + 2000) = 2500$
Total products sold by F = $\frac{1}{3} \times 1800 = 600$
Total number of unsold products by F = 2500 – 600 = 1900

S9. Ans.(c)
Sol. The total number of products manufactured by A in 2023 = $\frac{137.5}{100} \times 4000 = 5500$
Total number of unsold products by A in 2023 = 2200
Total number of products sold by A in 2023 = 5500 – 2200 = 3300
Required percentage = $\frac{3300-1800}{1800} \times 100 = 83.33\%$

S10. Ans.(c)
Sol. Total number of products sold by D and E = 1440 + 3120 = 4560
Total number of products unsold by C and A = 2200 + 1520 = 3720
Required difference = 4560 – 3720 = 840

S11. Ans.(e)
Sol. The total number of products manufactured by X = $\frac{60}{100} \times 6000 = 3600$
The total number of unsold products by X = $\frac{840}{7} \times 11 = 1320$
The total number of sold products by X= $3600 - 1320 = 2280$
Required percentage = $\frac{2280}{5000} \times 100 = 45.6\%$

S12. Ans.(a)
Sol. Total number of non-defective products manufactured by E = $6000 \times \frac{75}{100} = 4500$
Total number of defective products manufactured by E = $6000 \times \frac{25}{100} = 1500$
Total number of defective products unsold by E = $\frac{2}{5} \times 1500 = 600$
Total number of non-defective products unsold by E = $2880 - 600 = 2280$
Total non-defective products sold by E = $4500 - 2280 = 2220$
Required ratio = 2220 : 2280 = 37:38

Solutions (13-15):
Let total unsold flats in society A = y
So, total flats sold in society A = y + 1.5x
Given, all the flats were sold in society C
So, total sold flats in C = $42 \times \frac{10}{4} = 140$
Let total flats (sold + unsold) in society A = X
ATQ,
(42+78) + 140 + 2X = 612
2X = 612 – 260
2X = 352
X = 176

S13. Ans.(b)
Sol. Given, 61+1.5x = 176 - 61
3x/2 = 115 – 61
3x/2 = 54
x = 36

S14. Ans.(d)
Sol. New number of sold flats from society B = 42 + 28 = 70
New unsold flats in society B = 78 – 28 = 50
Required ratio = 50 : (70+140) = 50 : 210 = 5 : 21

S15. Ans.(e)
Sol. Total sold flats in society in D = 176/4 = 44
Required difference = 140 – 44 = 96

Solutions (16-20):
Let Y be 100x.
Cost price of article bought by A = 100x
Cost price of article bought by B = 150x
Cost price of article bought by C = 200x
Marked price of article by A= 100x + 100
Selling price of article by A = 100x + 40
Discount = 100x + 100 – (100x + 40) = 100 – 40 = 60
Cost price of article B = 150x = 5 (60)
2 = x
For A,
Cost price = Rs 200 = Y, selling price = 240, marked price = 300
d% = 60/300 x 100= 20%
profit % = 20%
Cost price of article bought by B = Rs 300
Cost price of article bought by C = Rs 400

S16. Ans.(a)
Sol. Value of d = 20%

S17. Ans.(a)
Sol. Y = 100x = 200

S18. Ans.(e)
Sol. Required answer = $40 \times \frac{40 \times 15 \times 5}{100} = Rs.\,1200$

S19. Ans.(d)
Sol. Marked price by C = 130% of 400 = Rs.520
Selling price = 520 – 49 = Rs 471.
Required answer = 471 – 240 = Rs 231

S20. Ans.(d)
Sol. Let the profit get by C be p.
So profit get by B be 2p.
$\frac{2p \times 12}{p \times X} = \frac{6}{1}$
X = 4 months

S21. Ans.(e)
Sol.

Let total number of type B pencil manufactured by all three companies= 500x

So, total number of type A pencil manufactured in all three companies = $500x \times \frac{60}{100} = 300x$

Total type B pencil manufactured by Z = $500x \times \frac{3}{10} = 150x$

Total number of pencils manufactured by X = $(500x+300x) \times \frac{1}{2} = 400x$

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y = y

And, let total number of type B pencil manufactured by Y = z

So, total number of type A pencil manufactured males in X = y+z

And total number of type B pencil manufactured in X = 400x – (y+z)

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x – y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, 3y + z = 300x --------(i)

Also, 550x – y = 500x

y = 50x

Now, z = 300x – 3× 50x

z = 150x

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

$200x - 150x = 300$

$50x = 300$

$x = 6$

Required sum $= (150+200) \times 6 = 2100$

S22. Ans.(d)
Sol.

Let total number of type B pencil manufactured by all three companies$= 500x$

So, total number of type A pencil manufactured in all three companies $= 500x \times \frac{60}{100} = 300x$

Total type B pencil manufactured by Z $= 500x \times \frac{3}{10} = 150x$

Total number of pencils manufactured by X $= (500x+300x) \times \frac{1}{2} = 400x$

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y $= y$

And, let total number of type B pencil manufactured by Y $= z$

So, total number of type A pencil manufactured males in X $= y+z$

And total number of type B pencil manufactured in X $= 400x - (y+z)$

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x – y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, $3y + z = 300x$ --------(i)

Also, $550x - y = 500x$

$y = 50x$

Now, $z = 300x - 3 \times 50x$

$z = 150x$

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

ATQ, $\frac{350x}{2} = 1050$

$350x = 2100$

$x = 6$

Total number of pencils manufactured by N $= 400 \times 6 \times \frac{125}{100} = 3000$

Number of type B pencils manufactured by Z & number of type A pencils manufactured by Y together $= 150 \times 6 + 50 \times 6 = 1200$

Required difference $= 3000 - 1200 = 1800$

S23. Ans.(c)
Sol.

Let total number of type B pencil manufactured by all three companies= 500x

So, total number of type A pencil manufactured in all three companies = $500x \times \frac{60}{100} = 300x$

Total type B pencil manufactured by Z = $500x \times \frac{3}{10} = 150x$

Total number of pencils manufactured by X = $(500x+300x) \times \frac{1}{2} = 400x$

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y = y

And, let total number of type B pencil manufactured by Y = z

So, total number of type A pencil manufactured males in X = y+z

And total number of type B pencil manufactured in X = 400x – (y+z)

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x – y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, 3y + z = 300x --------(i)

Also, 550x – y = 500x

y = 50x

Now, z = 300x – 3× 50x

z = 150x

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

Total pencils manufactured by M = $4 \times (200x + 50x) = 1000x$

Total type B pencils manufactured by all three companies = 500x

ATQ, 1000x – 500x = 2000

x = 4

Required value = $(500+300) \times 4 = 3200$

S24. Ans.(a)
Sol.

Let total number of type B pencil manufactured by all three companies= 500x

So, total number of type A pencil manufactured in all three companies = $500x \times \frac{60}{100} = 300x$

Total type B pencil manufactured by Z = $500x \times \frac{3}{10} = 150x$

Total number of pencils manufactured by X = $(500x+300x) \times \frac{1}{2} = 400x$

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y = y

And, let total number of type B pencil manufactured by Y = z

So, total number of type A pencil manufactured males in X = y+z

And total number of type B pencil manufactured in X = 400x – (y+z)

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x – y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, 3y + z = 300x --------(i)

Also, 550x – y = 500x

y = 50x

Now, z = 300x – 3× $50x$

z = 150x

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

Required ratio = 150x: 200x = 3:4

S25. Ans.(b)
Sol.

Let total number of type B pencil manufactured by all three companies= 500x

So, total number of type A pencil manufactured in all three companies = $500x \times \frac{60}{100} = 300x$

Total type B pencil manufactured by Z = $500x \times \frac{3}{10} = 150x$

Total number of pencils manufactured by X = $(500x+300x) \times \frac{1}{2} = 400x$

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y = y

And, let total number of type B pencil manufactured by Y = z

So, total number of type A pencil manufactured males in X = y+z

And total number of type B pencil manufactured in X = 400x – (y+z)

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x – y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, 3y + z = 300x --------(i)

y = 50x

Now, z = 300x − 3× 50x

z = 150x

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

Required answer (A) = $\frac{500x}{200x}$ × 100 = 250%

S26. Ans.(a)
Sol.

Let total number of type B pencil manufactured by all three companies= 500x

So, total number of type A pencil manufactured in all three companies = 500x × $\frac{60}{100}$ = 300x

Total type B pencil manufactured by Z = 500x × $\frac{3}{10}$ = 150x

Total number of pencils manufactured by X = (500x+300x) × $\frac{1}{2}$ = 400x

Let number of type A pencil manufactured in Z = number of type A pencil manufactured by Y = y

And, let total number of type B pencil manufactured by Y = z

So, total number of type A pencil manufactured males in X = y+z

And total number of type B pencil manufactured in X = 400x − (y+z)

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	y+z	400x − y - z
Y	y	z
Z	y	150x
Total	300x	500x

So, 3y + z = 300x --------(i)

Also, 550x − y = 500x

y = 50x

Now, z = 300x − 3× 50x

z = 150x

Companies	Total type A pencil manufactured	Total type B pencil manufactured
X	200x	200x
Y	50x	150x
Z	50x	150x

D = 150x − 50x = 100x

Required percentage = $\frac{100x}{150x}$ × 100 = 66.66%

S27. Ans.(a)
Sol.
For shop A, Total glasses sold = $\frac{50}{100} \times 968 = 484$
Total plats sold = 968 – 484 = 484
For shop C, Total utensils (Glass and Plats) sold = $\frac{100}{56} \times 504 = 900$
Total glasses sold = 900 – 504 = 396
Multiple of 8 = 8, 16, 24, 32
Odd place multiple is 8 and 24.
Percentage range = 8<X<30
X = 24%
Number of plats sold by shop D = (100 – 24)/100 × 900 = 684

S28. Ans.(e)
Sol.
For shop A, Total glasses sold = $\frac{50}{100} \times 968 = 484$
Total plats sold = 968 – 484 = 484
For shop C, Total utensils (Glass and Plats) sold = $\frac{100}{56} \times 504 = 900$
Total glasses sold = 900 – 504 = 396
Number of plats sold by B = 146 + 3 × (968 − 900) = 350
Required answer = 900 + 350 × $\frac{65}{35}$
=900 + 650 = 1550

S29. Ans.(d)
Sol.
For shop A, Total glasses sold = $\frac{50}{100} \times 968 = 484$
Total plats sold = 968 – 484 = 484
For shop C, Total utensils (Glass and Plats) sold = $\frac{100}{56} \times 504 = 900$
Total glasses sold = 900 – 504 = 396
Total number utensils (Glass and Plats) sold in Y = 3×484=1452
Number of plats sold by Y = 3/4×1452=1089
Required sum (1452 – 1089) + 396 = 759

S30. Ans.(d)
Sol.
For shop A, Total glasses sold = $\frac{50}{100} \times 968 = 484$
Total plats sold = 968 – 484 = 484
For shop C, Total utensils (Glass and Plats) sold = $\frac{100}{56} \times 504 = 900$
Total glasses sold = 900 – 504 = 396
Total number glasses sold by B = $\frac{968+900}{2} - 414$
=934 − 414 = 520
Total number of plats sold by shop B = $\frac{35}{65} \times 520 = 280$

S31. Ans.(e)
Sol.
For shop A, Total glasses sold = $\frac{50}{100} \times 968 = 484$

Total plats sold = 968 – 484 = 484

For shop C, Total utensils (Glass and Plats) sold = $\frac{100}{56} \times 504 = 900$

Total glasses sold = 900 – 504 = 396

Total number of students in Q = 822 × 4 - (900+900+968)

= 3288 – 2768 = 520

Number plats sold by shop B = $\frac{35}{100} \times 520 = 182$

S32. Ans.(d)
Sol.
Let total number of people in A and B be a & b respectively.

ATQ –

$a \times \frac{(100-60)}{100} \times \frac{75}{100} = 1800$

$\frac{3a}{10} = 1800$

a = 6000

Also, $b \times \frac{40}{100} \times \frac{3}{10} = 600$

b = 5000

Required percentage = $\frac{6000-5000}{5000} \times 100 = 20\%$

S33. Ans.(d)
Sol.
Let total number of people in B = x

ATQ –

$x \times \frac{(100-40)}{100} \times \frac{60}{100} = 2880$

$\frac{9x}{25} = 2880$

x = 8000

Total males not attending the seminar from B = $8000 \times \frac{40}{100} \times \frac{2}{5} = 1280$

Let total number of people in C = y

So,

$y \times \frac{45}{100} \times \frac{58}{100} - y \times \frac{55}{100} \times \frac{30}{100} = 384$

y = 4000

Total males not attending the seminar from C = $4000 \times \frac{45}{100} \times \frac{42}{100} = 756$

Required difference = 1280 – 756 = 524

S34. Ans.(c)
Sol.
Let total number of people in D = z

ATQ –

$z \times \frac{(100-55)}{100} \times \frac{50}{100} = 2250$

$\frac{9z}{40} = 2250$

z = 10000

Required difference = $10000 \times \frac{55}{100} \times \left(\frac{7-3}{10}\right) = 2200$

S35. Ans.(b)
Sol.

Let total number of people in A = n

$n \times \frac{(100-60)}{100} \times \left(\frac{75-25}{100}\right) = 1200$

$\frac{n}{5} = 1200$

n = 6000

Let total number of people in D= m

$m \times \frac{(100-55)}{100} \times \frac{50}{100} = 2700$

$\frac{9m}{40} = 2700$

m = 12000

Total people not attending the seminar from D = $12000 \times \frac{55}{100} = 6600$

Required ratio = 6600 : 6000 = 11 : 10

S36. Ans.(c)
Sol.

Total number of people in A be 2y

So, total number of people in C = $2y \times \frac{3}{2} = 3y$

$3y \times \frac{(100-45)}{100} \times \frac{(100-30)}{100} - 2y \times \frac{(100-60)}{100} \times \frac{(100-25)}{100} = 4440$

$\frac{231y}{200} - \frac{3y}{5} = 4440$

$\frac{231y-120y}{200} = 4440$

$\frac{111y}{200} = 4440$

y = 8000

Total males attending the seminar from both the cities = $16000 \times \frac{40}{100} \times \frac{25}{100} + 24000 \times \frac{55}{100} \times$

$\frac{30}{100} = 1600 + 3960 = 5560$

Required average = $\frac{5560}{2} = 2780$

Solutions (37-42):

$900 - 648 = 3X$

$X = 84$

Total cars sold by B = $8\frac{4}{7}X = \frac{60}{7} \times 84 = 720$

Given, 3552 = Z+720+648+2Z+132

2052 = 3Z

$Z = 684$

Total cars sold by D = 2Z + 132 = 2(684) + 132 = 1500

Total unsold cars by D = $\frac{1500}{3} = 500$

$500 = \frac{P}{3} + 150$

$P = 1050$

Total cars manufactured by B = P+150= 1050+150 = 1200

Total cars sold by B = 720

Total cars unsold by B = 1200 – 720 = 480

Total cars unsold by A = P – Z = 1050 – 684 = 366

Companies	Total cars manufactured	Total cars sold	Total cars unsold
A	1050	684	366
B	1200	720	480
C	900	648	252
D	2000	1500	500
Total	5150	3552	1598

S37. Ans.(b)

Sol. Total cars manufactured by E = $900 \times \frac{100+\frac{1050}{25}}{100} = 1278$

Total cars unsold by E = $\frac{5Z}{9} = \frac{5(684)}{9} = 380$

Total cars sold by E = 1278 – 380 = 898

S38. Ans.(e)

Sol. Total number of non-defective cars sold by B = $\frac{X}{4} + 39 = \frac{84}{4} + 39 = 60$

Total number of defective cars sold by B = $720 - 60 = 660$

Total number of defective cars sold by D = $2 \times 660 = 1320$

Total number of non-defective cars sold by D = $1500 - 1320 = 180$

From I. The difference between the total number of non-defective cars sold by B and D is 120 (true)

From II. The total number of defective cars sold by D is more than the total number of cars unsold by A. (true)

From III. The total number of defective cars sold by B is less than total number of cars manufactured by C. (true)

S39. Ans.(a)

Sol. Total number of SUV cars manufactured by A = $\left(\frac{684}{4} + \frac{84}{6}\right) = 171 + 14 = 185$

Total number of hatchback cars manufactured by A = 1050 – 185= 865

Total number of SUV cars sold by A = $\frac{P}{15} = \frac{1050}{15} = 70$

Total number of hatchback cars sold by A = 684 -70 = 614

Total number of SUV cars unsold by A = $185 - 70 = 115$

Total number of hatchback cars unsold by A = 366 – 115 = 251

From I. Total number of SUV cars unsold by A < Total number of hatchback cars sold by A. (Ture)

From II. Total number of hatchback cars manufactured by A > Total number of cars manufactured by C. (False)

From III. Total number of SUV cars sold by A = Total number of cars sold by D (False)

S40. Ans.(e)

Sol. Total number of cars sold by $F = \frac{7X+Z+12}{2} = \frac{588+684+12}{2} = 642$

Total number of cars unsold by $F = 2P = 2 \times 1050 = 2100$

Total cars manufactured by $F = 2100 + 642 = 2742$

Required difference = $2742 - (1050+900) = 792$

S41. Ans.(a)

Sol. $Y = \frac{366+480+252}{3} = 366$

$5Q = \frac{900+2000}{2} = 1450$

$Q = 290$

From I. $P-Z < Q$

$1050 -684 < 290$

$366 < 203$ (false)

From II. $Y+X > P$

$84+366 > 1050$

$450 > 1050$ (false)

From III. $Y-Q = X-8$

$366-290 = 84-8$

$76=76$ (true)

S42. Ans.(d)

Sol. Required percentage = $\frac{1500-(366+480)}{1500} \times 100 = 43.6\%$

Solutions. (43-48)

Let the number of red balls in bag A be X

$\frac{X}{20} = 0.5$

$X = 10$

Let the number of green balls in bag B be Y

$\frac{Y}{35} = 0.4$

$Y = 14$

Let the number of red balls in bag C be Z

$\frac{Z}{25} = 0.2$

$Z = 5$

Let the number of green balls in bag D be W

$\frac{W}{45} = 0.6$

$W = 27$

Bags	Total balls	Red balls	Green balls	Blue balls
A	20	10		
B	35		14	
C	25	5		
D	45		27	

S43. Ans.(b)
Sol. New number of red balls in bag A = $\frac{130}{100} \times 10 = 13$

Number of green balls in bag A = $\frac{1}{7} \times 14 = 2$

Number of blue balls in bag A = 20 – 13 – 2 = 5
Number of blue balls in bag C = 5
Number of red balls in bag C = 25 – 5 – 14 = 6

From I. $\frac{13}{20} - \frac{5}{25} = \frac{13}{20} - \frac{1}{5}$

$\frac{13-4}{20} = \frac{9}{20}$

The difference between the probability of picking a red ball from bag A and the probability of picking a blue ball from bag B is 0.1. (False)

From II. 27 – 14 = 13
The difference between the number of green balls in bags B and D is 13. (True)

From III. Required average = $\frac{13+5}{2} = 9$

The average number of red balls in bags A and C is 9. (True)

S44. Ans.(e)
Sol. Number of red balls in bag C = 5
Let the number of blue balls in bag C = X
And the number of green balls in bag C = 25 – 5 – X = 20 - X
Given, number of blue balls in bag C is more than the number of green balls in that bag
And the number of green balls in bag C is a prime number.
Possible number of green balls be 2,3,5 & 7
Possible number of blue balls be 18,17,15 & 13
From I. Total number of red and blue balls in bag D = 45 – 27 = 18
The number of blue balls in bag C = 18
The total number of red and blue balls in bag D can be equal to the number of blue balls in bag C. (Correct)

From II. Maximum probability of picking a blue ball form bag C = $\frac{18}{25} = 0.72$

The probability of picking a blue ball form bag C is less than 0.75. (Correct)

From III. Probability of picking a green ball from bag B = $\frac{14}{35} = 0.4$

The probability of picking a blue ball from bag C > 0.6 (1 - 0.4)
The sum of probability of picking a green ball from bag B and the probability of picking a blue ball from bag C is always greater than one. (incorrect)

S45. Ans.(d)
Sol. Total number of balls in bag E = 25
Let the number of blue balls in bag E be e
$\frac{e}{25} = 0.2$

e = 5
The number of red balls in bag D = 3 × 5 = 15
The number of green balls in bag D = 27
The number of blue balls in bag D = 45 – 15 - 27 = 3

From I. Required difference = 15 − 5 = 10
The difference between the blue balls in bag E and red balls in bag D is 9. (incorrect)
From II. Required probability = $\frac{3}{45} = \frac{1}{15}$
The probability of picking blue ball in bag D in less than 1/15. (incorrect)
From III. Required probability = $\frac{15c_2}{45c_2} = \frac{7}{66}$
The probability of picking two red balls from bag D is 7/66 (correct)

S46. Ans.(a)
Sol. The number of green balls in C = $27 \times \frac{1}{3} = 9$
The number of red balls in C = 5
The number of blue balls in C = $25 − 9 − 5 = 11$
Required probability = $\frac{11c_2}{25c_2} = \frac{11}{60}$

S47. Ans.(c)
Sol. Number of red balls in bag D = $8 \times 2 − 5 = 11$
Number of blue balls in bag D = $45 − 11 − 27 = 7$
From I. The number of blue balls in bag D is more than red ball in bag A. (incorrect)
From II. The number of red balls in bag D is less than that in bag A. (incorrect)
From III. The number of green balls in bag B is twice the red balls in bag D. (incorrect)

S48. Ans.(c)
Sol. The number of blue balls in bag A = $(27 − 14) − 5 = 8$
The number of green balls in bag A = 20 – 8 – 10 = 2
The number of green balls in bag C = $12 \times 4 − (2 + 14 + 27) = 5$
The number of blue balls in bag C = 25 – 5 – 5 = 15
Required difference = $15 − 2 = 13$

S49. Ans.(a)
Sol. Let marked price be Rs 100a
Selling price = $100a \times \frac{82}{100} = Rs\ 82a$
Cost price = $82a \times \frac{4}{5} = 65.6\ Rs$
ATQ,
$100a − (82a − 65.6a) = 836$
$83.6a = 836$
$a = 10$
Required price = 100a= Rs 1000

S50. Ans.(b)
Sol. Let the marked price of P and Q be R 100a and Rs 200a respectively.
Selling price of P = $100a \times \frac{82}{100} = Rs\ 82a$
Selling price of Q = $200a \times \frac{10}{100} = 180a\ Rs$
required ratio = 82a:180a
= 41:90

S51. Ans.(e)
Sol. Let the selling price of R be Rs 60a

And the selling price of S = $60a \times \frac{5}{2} = 150a \, Rs$

Cost price of R = $60a \times \frac{100}{120} = 50a \, Rs$

Cost price of S = $150a \times \frac{100}{125} = Rs \, 120a$

Required percentage = $\frac{50a}{120a} \times 100 = 41.67\%$

S52. Ans.(a)
Sol. In 2024

Let the marked price of Q and R be 300x and 400x respectively.

Selling price of R = $400x \times \frac{80}{100} = 320x$

Cost price of R = $\frac{320x}{160} \times 100 = 200x$

ATQ,

$320x - 200x = 960$

$x = 8$

Marked price of Q = 300x = 2400 Rs

In 2022

Marked price of Q = 2400 Rs

Required price = $2400 \times \frac{90}{100} = Rs \, 2160$

S53. Ans.(b)
Sol. Let the cost price of P in 2022 and 2024 be 100x

We have no data about profit or loss percentage

So, we can find the relation between the cost and selling price

Can't be determined.

Solutions (54-57):
Percentage of total students in B = $\frac{108}{360} \times 100 = 30\%$

Percentage of total students in D = $\frac{54}{360} \times 100 = 15\%$

Given, Institution B provide training to 1000 students.

And they provide training to only C's and D's students.

$2000 \times \frac{X + 25}{100} + 2000 \times \frac{15}{100} = 1000$

$2000 \times \frac{X + 25}{100} = 700$

X = 10

$Y = 100 - \left((10 + 25) + 30 + 15\right)$

Y = 20

institutions	Total students
A	400
B	600
C	700
D	300

S54. Ans.(e)
Sol. Total number of students in E = $600 \times \frac{(100+20+5)}{100} = 750$

Number of girls in E = $750 \times \frac{4(10)}{100} = 300$

Number of boys in E = 750 – 300 = 450

From I. The number of students in E > D provides training to students. (Correct)

From II. The number of boys in E < A provides training to students. (Correct)

From III. The number of girls in E = B provides training to students. (Incorrect)

S55. Ans.(e)
Sol. Z = 400 – 300 = 100

S56. Ans.(c)
Sol. A provides training to only C's students

So, A provides training 700 students

B provide training to only D's students

B provides training to 300 students

P = $\frac{700+300}{2} = 500$

From I. P is completely divisible by 5^2 (correct)

From II. P > X×Y (incorrect)

From III. P/ X = 2.5Y (correct)

S57. Ans.(b)
Sol. Total number of students in F = $400 \times \frac{20}{5} = 1600$

Total number of students provides training by A = 1600 + 600 = 2200

Required ratio = 2200 : 1000 = 11:5

Solutions (58-60):
Let the cakes baked by A, B and C be a, b, c respectively.

a+b+c = 126

$\frac{a-b}{c-b} = \frac{2}{1}$

(a+b)/2 = c

$\frac{a}{\frac{a+b}{2}} = \frac{8}{7}$

a/b = 4/3

4x = a, 3x = b 3.5x = c

4x+3x+3.5x = 126

12 = x

Bakeries	Baked cakes	Sold cakes	Unsold cakes
A	48	41	7
B	36	29	7
C	42	35	7

S58. Ans.(a)
Sol. Required answer = 7

S59. Ans.(d)
Sol. Required percentage = $\frac{41}{42} \times 100 = 97.61\% = 98\%$ (approx.)

S60. Ans.(e)
Sol. Chocolate cakes sold by C = 20% of 35 = 7
Required difference = 7 – 7 = 0

Solutions (61–65):
For A
Let books published online be x and book published offline be y
x – y = 210
20% (x + y) = y
x/y = 4/1= 4m/1m
3m =210
70 = m
Books published online = 280
Books published offline = 70
For C,
Let books published online be x and book published offline be y
x = y
Difference = 0 so (x=y)
Similarly,

Publishers	Total books	Books published online	Books published offline
A	350	280	70
B	280	252	28
C	2x	x	x
D	210	147	63
Total	840 + 2x	679+ x	161 + x

S61. Ans.(b)
Sol. Book published by C = 2(210) = 420
Online book published by C = 420/2 = 210
Required answer = 210 – 70 = 140

S62. Ans.(d)
Sol. Offline books published by C = 3× (112) – 28 -63 = 245
Required answer = $245 : \frac{70+28}{2} = 245 : 49 = 5 : 1$

S63. Ans.(b)
Sol. Books published by F = 120% of 280 = 336
$\frac{350+210}{2}$ =offline books published by F = 280
Books published online by F = 336 – 280 = 56
Required difference = 280 – 56 = 224

S64. Ans.(b)
Sol. Required percentage = $\frac{350}{28} \times 100 = 1250\%$

S65. Ans.(a)
Sol. Required difference = 679 + x – (161 + x) = 518

Solutions (66-70):
For company A
Production of items on Monday = $\frac{150}{16-13} \times 16 = 800$
Production of items on Tuesday = $\frac{150}{16-13} \times 13 = 650$
Similarly

Companies	Production of items on Monday	Production of items on Tuesday
A	800	650
B	950	760
C	660	540
D	1000	750
E	400	500

S66. Ans.(d)
Sol. Required ratio = 800 : 750 = 16:15

S67. Ans.(c)
Sol. Required percentage = $\frac{500}{1000} \times 100 = 50\%$

S68. Ans.(c)
Sol. Total production of items on Monday by B and C together = 950 + 660 = 1610
Total production of items on Tuesday by D and E together = 750 +500 = 1250
Required difference = 1610 – 1250 =360

S69. Ans.(e)
Sol. Total production of items on Monday by F = $\frac{120}{100} \times 650 = 780$
Total production on items on Monday and Tuesday together by F
= $\frac{17}{25} \times (1000 + 750) = 1190$
Total production on items on Tuesday by F = 1190 – 780 = 410

S70. Ans.(b)
Sol. Average of the production of items on Monday and Tuesday by B = $\frac{950+760}{2}$ = 855

Required percentage = $\frac{855-500}{500} \times 100$ = 71%

Solutions (71-75):

For company A   **For company B**

Total male employees = 440   Total male employees = 600

Let the female employees x.   Total Female employees = x

$\frac{440+x}{440-x} = \frac{9}{2}$ $\frac{600+x}{600-x} = \frac{13}{2}$

11x = 9(440) – 2(440)   15x = 13(600) – 600(2)

280 = x   x = 440

For company C,   **For company D,**

Total male employees = 400   Total male employees = 680

Let the female employees x.   Total female employees = x

$\frac{400+x}{400-x} = \frac{17}{3}$ $\frac{680+x}{680-x} = \frac{11}{6}$

20x = 17(400) – 3(400)   17x = 3400

280 = x   x = 200

Companies	Total employees	Male employees	Female employees
A	720	440	280
B	1040	600	440
C	680	400	280
D	880	680	200
Total	3320	2120	1200

S71. Ans.(e)
Sol. Required ratio = (280 + 280) : 1040
= 560: 1040
= 7:13

S72. Ans.(d)
Sol. Required percentage = $\frac{440-440}{440} \times 100 = 0\%$

S73. Ans.(a)
Sol. Total employees in X = $\frac{5}{3} \times 720$ = 1200

Total male employees in E = $\frac{5}{13} \times 1040$ = 400

Total female employees in X = 400

Males in X = 1200 – 400 = 800

Required difference = 800 – 400 = 400

S74. Ans.(e)

Sol. Male employees in F = X + 25 = $\frac{440+200}{2}$ = 320

X = 295

Total female employees in F = 25% of 680 = 170

Total employees in F = 320 + 170 = 490

Required difference = 490 – 295 = 195

S75. Ans.(e)

Sol. X = (2120 – 1200)/4 = 230

X=230

Solutions (76-80): For company A

Total toys manufactured = 40

Total toys unsold = $30 \times \frac{40}{100} = 12$

Total toys sold = 40-12 = 28

Metallic toys sold = $\frac{28+2}{2} = 15$

Plastic toys sold = 28 – 15 = 13

Similarly,

Companies	Total toys manufactured	Total toys unsold	Total toys sold	Metallic toys sold	Plastic toys sold
A	40	12	28	15	13
B	33	9	24	18	6
C	25	6	19	11	8
D	38	3	35	20	15

S76. Ans.(b)

Sol. Total number of metallic toys sold by A and C = 15 + 11 = 26

Total number of unsold toys by B and D = 9 + 3 = 12

Required difference = 26 – 12 = 14

S77. Ans.(e)

Sol. Total number of toys manufactured by E = $\frac{140}{100} \times 25 = 35$

Total toys sold by E = $\frac{(19+35)}{2} = 27$

Total toys unsold by E = 35 – 27 = 8

Required percentage = $\frac{8-8}{8} \times 100 = 0\%$

S78. Ans.(a)

Sol. Total number of unsold metallic toys by D = $\frac{10}{100} \times 20 = 2$

Total number of unsold plastic toys by D = 3 – 2 = 1

Total plastic toys manufactured by D = 15 + 1 = 16

Required difference = 28 – 16 = 12

S79. Ans.(b)
Sol. Required ratio = (13+15) : (9+6)
= 28 : 15

S80. Ans.(c)
Sol. Average number of toys sold by C and the plastic toys sold by A = $\frac{19+13}{2}$ = 16

Required percentage= $\frac{16}{20} \times 100 = 80\%$

Solutions (81-84): In box A
Let number of pens be 4a
And number of sharpeners = 3a
Given, Total number of sharpeners and erasers = 10
So, number of erasers = 10 - 3a
Also given, Difference between the probability of picking a pen and the probability of picking an eraser = 2/9

$$\frac{4aC_1}{4aC_1 + 10} - \frac{10 - 3aC_1}{4aC_1 + 10} = \frac{2}{9}$$

$$\frac{4a}{4a + 10} - \frac{10 - 3a}{4a + 10} = \frac{2}{9}$$

$$\frac{4a - 10 + 3a}{4a + 10} = \frac{2}{9}$$

$(7a - 10)9 = 2(4a + 10)$
$63a - 90 = 8a + 20$
$55a = 110$
$a = 2$
Similarly,

Boxes	Pens	sharpeners	Erasers
A	8	6	4
B	6	8	3
C	9	6	7

S81. Ans.(c)
Sol. Required ratio = (7+3) : 8
= 10 : 8 = 5:4

S82. Ans.(d)
Sol. P = 6/4 = 1.5
Q = 6/3 = 2
From I. P > Q (it is incorrect)
From II. 4P = 3Q (it is correct)
From III. Q : P = 4 : 3 (it is correct)

S83. Ans.(e)
Sol. Required sum = 6 + 8 + 6 = 20

S84. Ans.(c)
Sol. X = $\frac{8+6+4}{3} = \frac{18}{3} = 6$

S85. Ans.(d)
Sol. Invalid voters in city C = $620 \times \frac{20}{100} = 124$

Invalid voters in city D = $\frac{124}{4} \times 7 = 217$

Valid voters in city C = 620 – 124 = 496

Valid voters in city D = 300 -217 = 83

Required difference = 496 – 83 = 413

S86. Ans.(a)
Sol. Total males in city A = $\frac{5}{12} \times 240 = 100$

Total females in city A = $\frac{7}{12} \times 240 = 140$

Invalid voters in city A = $\frac{3}{8} \times 240 = 90$

Valid voters in city A = 240 – 90 = 150

Valid female voters = 150/2=75

Valid male voters = 150 – 75 = 75

Invalid male voters = 100 – 75 = 25

Required difference = 75 – 25 = 50

S87. Ans.(c)
Sol. X = 440 – 300 = 140

I. X > 120 (correct)

II. X < 150 (correct)

III. X = Total number of people who votes in city A in 2018 (incorrect)

S88. Ans.(c)
Sol. Total number of people who vote in city E in 2013 = $\frac{125}{100} \times \frac{240+360}{2} = 375$

Invalid voters = $375 \times \frac{1}{3} = 125$

S89. Ans.(e)
Sol. The total number of people who vote in city A in 2020 = $\frac{3}{5} \times 300 = 180$

Total number of females who vote in city A in 2020 = $\frac{4}{9} \times 180 = 80$

Required percentage = $\frac{80}{500} \times 100 = 16\%$

S90. Ans.(b)
Sol. Required ratio = (560-300) : (440+360)/2

= 260 : 400

= 13 : 20

Solutions (91-92):

Total items manufactured by A, B C together in 2021 = 1500 × 3 = 4500

Total items manufactured by A, B C together in 2022 = 1650 × 3 = 4950

Total items manufactured by B in 2021 = $\frac{20}{100} \times 4500 = 900$

Total items manufactured by B in 2022 = $\frac{1}{5} \times 4900 = 990$

Total items manufactured by C in 2021 = $\frac{4}{3} \times 900 = 1200$

Total items manufactured by A in 2021 = 4500 – 1200 -900 = 2400

Total items manufactured by A in 2022 = 4000 – 2400 = 1600

Total items manufactured by C in 2022 = 4950 – 1600 – 990 = 2360

S91. Ans.(a)

Sol. Required difference = 1200+2360 – 1600 = 1960

S92. Ans.(b)

Sol. Required percentage = $\frac{990}{1200} \times 100 = 82.5\%$

Solutions (93-97):

Let the male candidates interviewed on Monday and the female candidates interviewed on Tuesday be 4a and 3a respectively.

Female candidates interviewed on Monday = 3a-10

Male candidates interviewed on Tuesday = 190 – 3a

Male candidates interviewed on Wednesday = $1.2(3a - 10)$

Given, 1.2(3a-10) + 190-3a + 4a = 90× 3

3.6a – 12 + 190 +a = 270

4.6a = 92

a = 20

Total candidates (males and females) interviewed on Monday and Tuesday together = 420 -190 =230

Days	Total candidates	Male candidates	Female candidates
Monday	130	80	50
Tuesday	190	130	60
Wednesday	100	60	40
Total	420	270	150

S93. Ans.(e)

Sol. Required ratio = 40 : 80 = 1:2

S94. Ans.(c)

Sol. Required percentage = $\frac{100-60}{100} \times 100 = 40\%$

S95. Ans.(d)
Sol. Required difference = 60 – 50 = 10

S96. Ans.(c)
Sol. Required answer = $\frac{80}{100} \times 130 + \frac{35}{100} \times 60 = 125$

S97. Ans.(c)
Sol. Required difference = 150 -130 = 20