

IBPS Cleks Main Practice Test 8

QUANTITATIVE APTITUDE

Directions (Q. 51-55): What should come in place of question mark (?) in the following questions?

1. $\sqrt{930.25} + \sqrt{1482.25} - 45\% \text{ of } 180 + 46.5 = \sqrt{?}$
 1) 1180.25 2) 1390.25
 3) 1190.25 4) 1290.75
 5) 1490.25

2. $79\% \text{ of } 790 + \frac{1}{3} \text{ of } 675 \div 0.5 = ?$
 1) 1074.1 2) 984.21
 3) 1284.21 4) 1181.1
 5) 971.1

3. $\frac{(1728)^{0.6} \div (144)^{0.3} \times (0.0144)^{0.4}}{10^{0.4}} = (?)^2$
 1) 1.1 2) 1.8
 3) 2 4) 1.2
 5) 3

4. $174\% \text{ of } 445 + 9\% \text{ of } 167 + \sqrt{1521} = ?$
 1) 728.43 2) 828.33
 3) 448.63 4) 653.63
 5) 1028.73

5. $19\frac{1}{7} + 26\frac{2}{3} - 9\frac{1}{3} + 5\frac{1}{7} = ?$
 1) $42\frac{13}{21}$ 2) $31\frac{13}{21}$
 3) $42\frac{1}{7}$ 4) $33\frac{1}{3}$
 5) $41\frac{13}{21}$

Directions (Q. 56-60): Study the following table carefully and answer the given questions.

Percentage of shares sold by six companies in five cities T = No. of shares of each company available in that city.

Note: Equal no. of shares of each company are available in a city.

Company	Delhi T = 4000	Patna T = 5000	Chennai T = 4200	Mumbai T = 8600	Kolkata T = 4800
A	28	58	62	65	60
B	53	52	68	35	30
C	55	49	26	50	40
D	45	37	36	40	45
E	35	42	54	25	50
F	27	32	58	45	57

6. What is the ratio of the number of shares sold by Company A and B together in Chennai to that sold by Company D and E together in the same city?
 1) 9 : 13 2) 12 : 11
 3) 13 : 9 4) 10 : 3
 5) 11 : 13

7. What is the difference between the no. of shares sold by Company D, E and F together in Mumbai and that by Company A, B and C together in Delhi?
 1) 4120 2) 4020
 3) 5040 4) 5440
 5) 5020

8. The no. of shares sold by Company B in Kolkata is what percent less than the no. of shares sold by Company C in Patna? (Rounded off to two digits after decimal)
 1) 33.33% 2) 52.22%
 3) 48.22% 4) 41.22%
 5) 51.22%

9. What is the average no. of shares sold by all the companies in Kolkata?
 1) 2256 2) 2050
 3) 1965 4) 1856
 5) None of these

10. What is the approximate average percentage of shares sold by Company F in all the five cities taken together?
 1) 42.8 2) 46.8
 3) 52.8 4) 46.6
 5) 43.8

Directions (Q. 61-65): What should come in place of question mark (?) in the following number series?

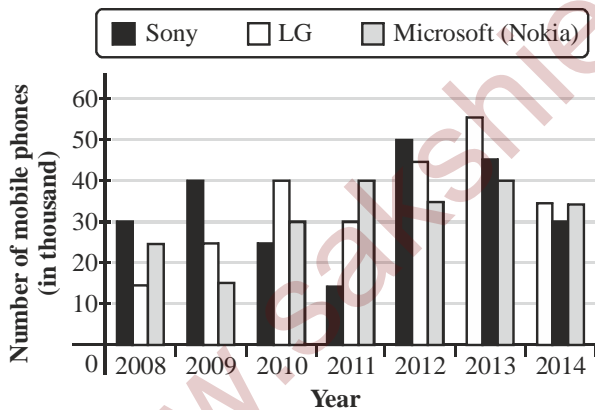
11. 8835 9023 9213 9405 ? 9795

- 1) 9899 2) 9599
 3) 9539 4) 9509
 5) None of these
12. 5477 5626 5777 ? 6085 6242 6401
 1) 5830 2) 5960
 3) 5840 4) 5950
 5) 5930
13. 1716 2184 2730 3360 4080 ? 5814
 1) 4896 2) 4876
 3) 4796 4) 4696
 5) 5096
14. 137 274 411 548 ? 822 959
 1) 785 2) 635
 3) 735 4) 685
 5) 695
15. 8 12 18 27 40.5 60.75 ?
 1) 81.125 2) 92.125
 3) 91.125 4) 94.125
 5) 87.275

Directions (Q. 66-70): Study the following graph carefully to answer the questions that follow.

Number of mobile phones (in thousand) manufactured by three different companies in seven different years

(Note: Only two types - CDMA and GSM were manufactured)

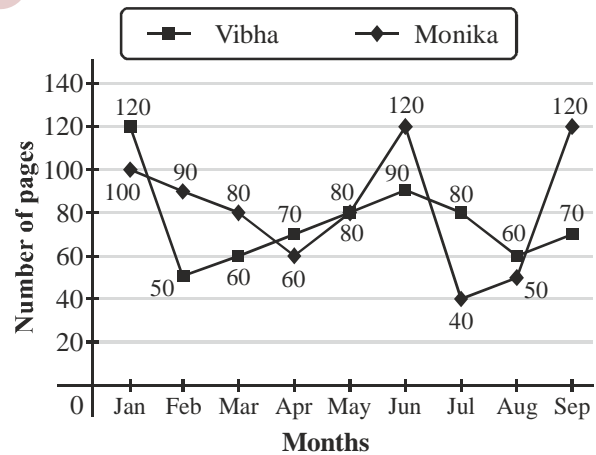


16. If 25 percent of the number of mobile phones manufactured by Sony over all the years together were CDMA then what was the number of GSM mobile phones manufactured by Sony over all the years together?
 1) 28.75 lakh 2) 1.875 lakh
 3) 16.875 lakh 4) 1.8 lakh
 5) None of these
17. What was the approximate average number of mobile phones manufactured by LG over all the years together?
 1) 32857 2) 33857
 3) 31577 4) 42860
 5) 52847

18. If the cost of manufacturing of a mobile phone each year was ₹ 1400 by Microsoft (Nokia) then what was the total expenditure of Microsoft (Nokia) for manufacturing all the mobile phones in the given years?
 1) ₹ 42 crore 2) ₹ 40 crore
 3) ₹ 38 crore 4) ₹ 39.4 crore
 5) ₹ 32.9 crore
19. What was the percentage increase in the number of mobile phones manufactured by LG in the year 2010 as compared to the previous year?
 1) 45% 2) 60%
 3) 50% 4) 55%
 5) 40%
20. What was the ratio of the number of mobile phones manufactured by Sony in the year 2009 to that manufactured by Microsoft in the year 2014?
 1) 3 : 5 2) 5 : 4
 3) 8 : 7 4) 5 : 3
 5) 2 : 5

Directions (Q. 71-75): Refer to the graph below and answer the questions that follow:

Vibha and Monika wrote two different books in a span of 9 months. The monthly records of the number of pages written by them are shown below in the graph.



21. What is the difference between the number of pages written by Vibha and Monika for the first four months?
 1) 40 2) 35
 3) 30 4) 45
 5) None of these
22. In which month was the difference between the no. of pages written by Monika and that by Vibha the maximum and how much?
 1) September, 50 pages 2) July, 20 pages
 3) February, 40 pages 4) June, 30 pages
 5) None of these

23. Find the average number of pages written by Monika in the last six months.
- 1) 50
 - 2) 75
 - 3) 65
 - 4) 70
 - 5) None of these
24. Had Vibha increased her speed of writing pages per month by 20%, then the increase in the average of the first three months would have been
- 1) 54
 - 2) 34
 - 3) 27
 - 4) 18
 - 5) None of these
25. Find the difference between the percentage change in the number of pages written by Vibha from May to June and that in the number of pages written by Monika.
- 1) 37.5%
 - 2) 34%
 - 3) 32.5%
 - 4) 40.75%
 - 5) None of these
- Directions (Q. 76-80): In each question two equations numbered I and II are given. You have to solve both the equations and find out the correct option.**
26. **I** $x^2 + 15x + 36 = 0$ **II** $4y^2 - 13y - 17 = 0$
- 1) $x \leq y$
 - 2) $x \geq y$
 - 3) Relationship between x and y can't be established
 - 4) $x < y$
 - 5) $x > y$
27. **I** $x^2 + 5x - 234 = 0$ **II** $y^3 = 2197$
- 1) $x > y$
 - 2) $x < y$
 - 3) $x \geq y$
 - 4) Relationship between x and y can't be established
 - 5) $x \leq y$
28. **I** $5x^2 - 17x - 22 = 0$ **II** $y^2 + 20y - 156 = 0$
- 1) $x \leq y$
 - 2) $x \geq y$
 - 3) $x < y$
 - 4) $x > y$
 - 5) Relationship between x and y can't be established
29. **I** $x^2 + 5\sqrt{3}x - 42 = 0$ **II** $y^2 - 8\sqrt{2}y + 30 = 0$
- 1) $x > y$
 - 2) $x < y$
 - 3) Relationship between x and y can't be established
 - 4) $x \geq y$
 - 5) $x \leq y$
30. **I** $10x^2 - 17x - 11 = 0$ **II** $6y^2 + 19y + 15 = 0$
- 1) $x \geq y$
 - 2) $x \leq y$
 - 3) $x < y$
 - 4) Relationship between x and y can't be established
 - 5) $x > y$
31. In what time will ₹ 8500 amount to ₹ 15767.50 at 9% per annum simple interest?
- 1) $7\frac{1}{2}$ years
 - 2) $9\frac{1}{2}$ years
 - 3) 9 years
 - 4) 8 years
 - 5) 7 years
32. Arun's expenditure and savings are in the ratio of 3 : 2. His income increases by 10%. His expenditure also increases by 12%. By what percent do his savings increase?
- 1) 10
 - 2) 8
 - 3) 7
 - 4) 12
 - 5) 18
33. A train covers a certain distance in 40 minutes if the train runs at a speed of 60 kmph. Find the speed of the train at which it must run to reduce the time of journey to 30 minutes.
- 1) 60 kmph
 - 2) 80 kmph
 - 3) 50 kmph
 - 4) 75 kmph
 - 5) None of these
34. The perimeter of the sector of a circle of radius 6.2 cm is 17.4 cm. Find the area of the sector.
- 1) 14.5 cm^2
 - 2) 15.5 cm^2
 - 3) 16 cm^2
 - 4) 17.5 cm^2
 - 5) 15.6 cm^2
35. How many words can be formed with the letters of the word ORDINATE so that vowels occupy odd places?
- 1) 256
 - 2) 676
 - 3) 586
 - 4) 576
 - 5) 120

Directions (Q. 86-90): Read the following table carefully to answer these questions.

Average marks obtained by 20 boys and 20 girls in five subjects of five different schools.

Subject	Maximum marks	P		Q		R		S		T	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
English	200	85	90	80	75	100	110	65	60	105	110
History	100	40	50	45	50	50	55	40	45	65	60
Geography	100	50	40	40	45	60	55	50	55	60	65
Maths	200	120	110	95	85	135	130	75	80	130	135
Science	200	105	125	110	120	125	115	85	90	140	135

36. What was the total marks obtained by boys in History from School Q?

- 1) 900
- 2) 1000
- 3) 800
- 4) 1300
- 5) 980

37. In which of the following subjects did the girls have the highest average percentage of marks from all the schools?

- 1) Science
- 2) Geography
- 3) English
- 4) History
- 5) Maths

38. The pooled average marks of both boys and girls in all the subjects was minimum from which of the following schools?

- 1) Q
- 2) P
- 3) T
- 4) S
- 5) R

39. In which of the following schools the total marks obtained by the girls in Mathematics was exactly 100% more than the total marks obtained by the boys in History?

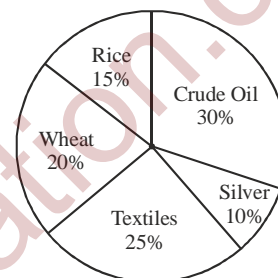
- 1) R
- 2) S
- 3) P
- 4) Q
- 5) T

40. What was the difference between the total marks obtained in Mathematics by the boys from School R and that obtained in the same subject by the girls from School S?

- 1) 1111
- 2) 1100
- 3) 1000
- 4) 1200
- 5) 1400

Directions (Q. 91-95): Refer to the pie-chart below and answer the questions that follow.

The pie-chart shows the imports of different products of a country in the year 2014. The total value of imports is ₹ 72000 crore



41. Find the value of imports of Textiles.

- 1) ₹ 21600 crore
- 2) ₹ 20000 crore
- 3) ₹ 18000 crore
- 4) ₹ 22200 crore
- 5) ₹ 28000 crore

42. Find the central angle for Silver.

- 1) 36°
- 2) 48°
- 3) 54°
- 4) 72°
- 5) 90°

43. Find the ratio of the values of imports of Wheat to Silver to Rice.

- 1) 2 : 4 : 3
- 2) 3 : 5 : 4
- 3) 4 : 2 : 3
- 4) 1 : 2 : 3
- 5) 3 : 2 : 1

44. The average value of the imports is

- 1) ₹ 12000 crore
- 2) ₹ 144000 crore
- 3) ₹ 16800 crore
- 4) ₹ 17200 crore
- 5) ₹ 18200 crore

45. Which of the two pairs of imported goods have equal value?

- 1) (Crude Oil, Wheat) and (Textile, Rice)
- 2) (Wheat, Silver) and (Rice, Crude Oil)
- 3) (Textile, Silver) and (Rice, Crude Oil)
- 4) (Rice, Crude Oil) and (Textile, Wheat)
- 5) None of these

Directions (Q. 96-100): Refer to the data given below and answer the questions that follow.

The production of a company in 2001 was

- double than that in 1999. The production in 1999, 2000, 2002, 2003 and 2004 were 30000, 46000, 70000, 50000 and 80000 respectively.
46. For how many years was the production more than the average production for the given years?
- 1) 1 2) 2
3) 3 4) 4
5) 6
47. Which of the following pairs of years has the average production equal to the average production for the years 1999 and 2004?
- 1) 1999, 2001 2) 2000, 2002
3) 2003, 2004 4) 2001, 2003
5) 2001, 2002
48. What was the percentage increase in production in the year 2004 as compared to that in the year 1999?
- 1) 62.5% 2) 50%
3) 166.6% 4) 200%
5) 133.33%
49. What was the percentage decrease in the year 2003 as compared to the previous year?
- 1) 25.4% 2) 28.6%
3) 32% 4) 40%
5) 28.4%
50. In which year was the percentage increase in production the maximum as compared to the previous year?
- 1) 2004 2) 2002
3) 2003 4) 2000
5) 2001

SOLUTIONS

IBPS Clerks Main - Practice Test 8

1. (3) $\sqrt{?} = \sqrt{930.25} + \sqrt{1482.25} - \frac{45 \times 180}{100} + 46.5$
- $$= 30.5 + 38.5 - 45 \times 1.8 + 46.5$$
- $$= 115.5 - 81 = 34.5$$
- $\therefore ? = 34.5 \times 34.5 = 1190.25$
2. (1) $? = \frac{79 \times 790}{100} + \frac{1}{3} \times \frac{675}{0.5}$
- $$= 624.1 + 450 = 1074.1$$
3. (4) $(?)^2 = \frac{(1728)^{0.6} \div (144)^{0.3} \times (0.0144)^{0.4}}{(10)^{0.4}}$
- $$= \frac{(12)^{1.8} \div (12)^{0.6} \times (0.12)^{0.8}}{10^{0.4}}$$
- $$= \frac{(12)^{1.8} \div (12)^{0.6} \times (12)^{0.8}}{10^{0.4} \times 10^{1.6}}$$
- $$= \frac{(12)^{1.8-0.6+0.8}}{10^{0.4+1.6}} = \frac{(12)^2}{10^2}$$
- or, $? = \sqrt{\left(\frac{12}{10}\right)^2} = \frac{12}{10} = 1.2$
4. (2) $? = \frac{174 \times 445}{100} + \frac{9 \times 167}{100} + 39$
- $$= 774.3 + 15.03 + 39 = 828.33$$
5. (5) $19\frac{1}{7} + 26\frac{2}{3} - 9\frac{1}{3} + 5\frac{1}{7} = ?$
- or, $? = (19 + 26 + 5 - 9) + \left(\frac{1}{7} + \frac{2}{3} - \frac{1}{3} + \frac{1}{7}\right)$
- $$= 41 + \left(\frac{3+14-7+3}{21}\right) = 41\frac{13}{21}$$
6. (3) Number of shares sold in Chennai by Company A = $\frac{4200 \times 62}{100} = 2604$
- Similarly, by Company B = $\frac{68 \times 4200}{100} = 2856$
- By Company D = $\frac{36 \times 4200}{100} = 1512$

- By Company E = $\frac{4200 \times 54}{100} = 2268$
- Reqd. ratio = $\frac{2604 + 2856}{1512 + 2268} = \frac{5460}{3780}$
- $= \frac{546}{378} = \frac{182}{126} = \frac{91}{63} = \frac{13}{9} = 13:9$
7. (2) Reqd difference
- $$= \frac{8600 \times (40 + 25 + 45)}{100} - \frac{4000 \times (28 + 53 + 55)}{100}$$
- $$= 86 \times 110 - 40 \times 136$$
- $$= 9460 - 5440 = 4020$$
8. (4) Reqd % less = $\frac{50 \times 49 - 48 \times 30}{50 \times 49} \times 100$
- $$= \frac{2450 - 1440}{2450} \times 100 = \frac{1010}{2450} \times 100 = 41.22\%$$
9. (1) Reqd average
- $$= \frac{1}{6} \times 4800 \left(\frac{60 + 30 + 40 + 45 + 50 + 57}{100} \right)$$
- $$= \frac{800 \times 282}{100} = 2256$$
10. (5) Reqd average %
- $$= \frac{27 + 32 + 58 + 45 + 57}{5} = \frac{219}{5} = 43.8$$
11. (2) The series is $(94)^2 - 1, (95)^2 - 2, (96)^2 - 3, (97)^2 - 4, (98)^2 - 5, (99)^2 - 6,$
i.e, 8835, 9023, 9213, 9405, **9599**, 9795
12. (5) The series is +149, +151, +153, +155, +157, +159, +161,
13. (1) The series is $(12)^3 - 12, (13)^3 - 13, (14)^3 - 14, (15)^3 - 15, (16)^3 - 16, (17)^3 - 17, (18)^3 - 18, (19)^3 - 19, \dots$
1716, 2184, 2730, 3360, 4080, **4896**, 5814
14. (4) The series is +137, +137, repeated
15. (3) The series is +4, +6, +9, +13.5, +20.25, +30.375....
16. (2) Total no. of mobile phones manufactured by Sony = $30 + 40 + 25 + 15 + 50 + 55 + 35 = 250$ thousand
Reqd. no. of GSM mobile phones manufactured by Sony

- $$= \frac{250 \times 75}{100} = 187.5 \text{ thousand} = 1.875 \text{ lakh}$$
17. (1) Reqd average
- $$= \frac{15 + 25 + 40 + 30 + 45 + 45 + 30}{7}$$
- $$= \frac{230}{7} = 32.857 \text{ thousand} = 32857$$
18. (5) Reqd expenditure
- $$= 1400 \times (25 + 15 + 30 + 40 + 35 + 40 + 50)$$
- $$= 1400 \times 235000 = ₹ 32.9 \text{ crore}$$
19. (2) Reqd % increase = $\frac{40 - 25}{25} \times 100 = 60\%$
20. (3) Reqd. ratio = $\frac{40}{35} = 8:7$
21. (3) Total no. of pages written by Vibha in first four months = $100 + 90 + 80 + 60 = 330$
Total no. of pages written by Monika in first four months = $120 + 50 + 60 + 70 = 300$
 \therefore Reqd. difference = $330 - 300 = 30$
22. (1)
23. (2) Total number of pages written by Monika in last six months
- $$= 70 + 60 + 80 + 90 + 80 + 70 = 450$$
- $$\therefore \text{Average} = \frac{450}{6} = 75$$
24. (4) Increase in average
- $$= \frac{20}{100 \times 3} (100 + 90 + 80) = \frac{54}{3} = 80$$
25. (1) % increase in the number of pages written by Monika = $\frac{100}{8} \%$
% Increase in the number of pages written by Vibha = $\frac{40}{80} \times 100 = 50\%$
Hence difference
- $$= \left(50 - \frac{100}{8} \right) \% = \frac{300}{8} \% = 37.5\%$$
26. (4) **L** $x^2 + 15 + 36 = 0$
or, $x^2 + 12x + 3x + 36 = 0$
or, $x(x + 12) + 3(x + 12) = 0$

$$\text{or, } (x+3)(x+12)=0$$

$$\therefore x = -3, -12$$

$$\text{II } 4y^2 - 13y - 17 = 0$$

$$\text{or, } 4y^2 - 17y + 4y - 17 = 0$$

$$\text{or, } 4y(y+1) - 17(y+1) = 0$$

$$\text{or, } (4y-17)(y+1) = 0$$

$$\therefore y = -1, \frac{17}{4}$$

Hence, $x < y$

$$27. (5) \text{ I } x^2 + 5x - 234 = 0$$

$$\text{or, } x^2 + 18x - 13x + 234 = 0$$

$$\text{or, } x(x+18) - 13(x+18) = 0$$

$$\text{or, } (x-13)(x+18) = 0$$

$$\therefore x = 13, -18$$

$$\text{II } y = \sqrt[3]{2197} = \sqrt[3]{13 \times 13 \times 13}$$

$$\therefore y = 13$$

Hence $x \leq y$

$$28. (5) \text{ I } 5x^2 - 17x - 22 = 0$$

$$\text{or, } 5x^2 - 22x + 5x - 22 = 0$$

$$\text{or, } 5x^2 + 5x - 22x - 22 = 0$$

$$\text{or, } 5x(x+1) - 22(x+1) = 0$$

$$\text{or, } (5x-22)(x+1) = 0$$

$$\therefore x = -1, \frac{22}{5} = 4.4$$

$$\text{II } y^2 + 20 - 156 = 0$$

$$\text{or, } y^2 + 26y - 6y - 156 = 0$$

$$\text{or, } y(y+26) - 6(y+26) = 0$$

$$\therefore y = 6, -26$$

$$29. (2) \text{ I } x^2 + 5\sqrt{3}x - 42 = 0$$

$$\text{or, } x^2 + 7\sqrt{3}x - 2\sqrt{3}x - 42 = 0$$

$$\text{or, } x(x+7\sqrt{3}) - 2\sqrt{3}(x+7\sqrt{3}) = 0$$

$$\text{or, } (x-2\sqrt{3})(x+7\sqrt{3}) = 0$$

$$\therefore x = 2\sqrt{3}, -7\sqrt{3}$$

$$\text{II } y^2 - 8\sqrt{2}y + 30 = 0$$

$$\text{or, } y^2 - 5\sqrt{2}y - 3\sqrt{2}y + 30 = 0$$

$$\text{or, } y(y-5\sqrt{2}) - 3\sqrt{2}(y-5\sqrt{2}) = 0$$

$$\text{or, } (y-3\sqrt{2})(y-5\sqrt{2}) = 0$$

$$\text{or, } y = 3\sqrt{2}, 5\sqrt{2}$$

Hence, $x < y$

$$30. (5) \text{ I } 10x^2 - 17x - 11 = 0$$

$$\text{or, } 10x^2 - 22x + 5x - 11 = 0$$

$$\text{or, } 5x(2x+1) - 11(2x+1) = 0$$

$$\text{or, } (5x-1)(2x+1) = 0$$

$$\therefore x = \frac{11}{5}, -\frac{1}{2}$$

$$\text{II } 6y^2 + 19y + 15 = 0$$

$$\text{or, } 6y^2 + 10y + 9y + 15 = 0$$

$$\text{or, } 3y(2y+3) + 5(2y+3) = 0$$

$$\text{or, } (3y+5)(2y+3) = 0$$

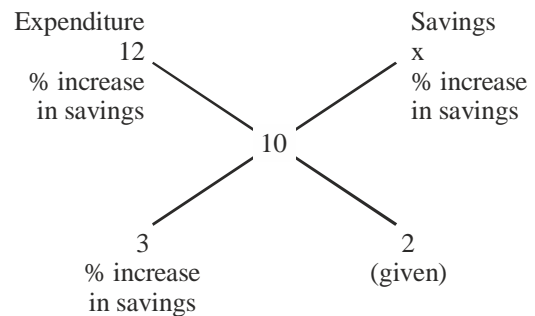
$$\therefore y = -\frac{5}{3}, -\frac{3}{2}$$

Hence, $x > y$

$$31. (2) \text{ SI} = 15767.50 - 8500 = 7267.5$$

$$\text{Time} = \frac{7267.5 \times 100}{8500 \times 9} = 9.5 = 9\frac{1}{2} \text{ years}$$

$$32. (3) \text{ Allegation Method}$$



We get two values of x : 7 and 13. But to get a viable answer we must keep in mind that the central value (10) must lie between x and 12. Thus the value of x should be 7 and not 13.

Reqd percentage increase = 7%.

$$33. (2) \text{ Let the distance be } D \text{ km}$$

$$\frac{D}{60} = 40 \text{ minutes} = \frac{40}{60} = \frac{2}{3}$$

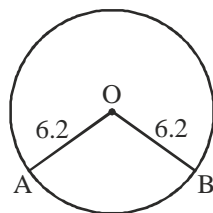
$$\text{or } D = \frac{2}{3} \times 60 = 40 \text{ km}$$

Let the required speed be x kmph

Now, $x \times \frac{1}{2} = 40$ (30 minutes = $\frac{1}{2}$ hours)

$\therefore x = 80$ kmph

34. (2) Let AOB be the sector. Then the perimeter of the sector AOB = 17.4 cm



or, $OA + OB + \text{arc AB} = 17.4$

or, $6.2 + 6.2 + \text{arc AB} = 17.4$

or, $\text{arc AB} = 17.4 - 12.4 = 5$ cm

\therefore Area of the sector = $\frac{1}{2} \times \text{length of arc}$

$\times \text{radius} = \frac{1}{2} \times 5 \times 6.2 = 15.5$ cm²

35. (4) There are 4 vowels are 4 consonants in the word ORDINATE.

We have to arrange the letters in a row such that vowels occupy odd places. there are 4 odd places 1, 3, 5 and 7. Four vowels can be arranged in these 4 odd places in 4P_4 ways = 4! ways.

Remaining 4 even places viz 2, 4, 6, 8 are to be occupied by 4 consonants. This can be done in 4! ways.

\therefore Total no. of words in which vowels can occupy odd places = $4! \times 4! = 576$

36. (1) Required marks obtained by 20 boys in History = $45 \times 20 = 900$

37. (1) Average % of marks obtained by girls is as follows in all schools and subjects.

Subject	School				
	P	Q	R	S	T
English	45	37.5	55	30	55
History	50	50	55	45	60
Geography	40	45	55	55	65
Maths	55	42.5	65	40	67.5
Science	62.5	60	57.5	45	67.5

Hence in Science the average % marks obtained from all the schools in maximum.

38. (4) Pooled average marks of boys and girls

Subject	School				
	P	Q	R	S	T
English	87.5	77.5	105	62.5	107.5
History	45	47.5	52.5	42.5	62.5
Geography	45	42.5	57.5	52.5	62.5
Maths	115	90	132.5	77.5	132.5
Science	115	115	120	87.5	137.5

Hence in school S pooled average marks is minimum.

39. (2) Total marks obtained by girls in Maths in School P = $110 \times 20 = 2200$

Similarly,

in School Q = $85 \times 20 = 1700$

in School R = $130 \times 20 = 2600$

in School S = $80 \times 20 = 1600$

in School T = $135 \times 20 = 2700$

Total marks obtained by boys in History in School P = $40 \times 20 = 800$

Similarly, in School Q = $45 \times 20 = 900$

in School R = $50 \times 20 = 1000$

in School S = $40 \times 20 = 800$

in School T = $65 \times 20 = 1300$

Hence in School S the marks obtained by girls is twice the marks obtained by boys in History.

40. (2) Req'd difference = $135 \times 20 - 80 \times 20$
 $= 2700 - 1600 = 1100$

41. (3) Req'd value of textiles = 25% of 72000

$$= \frac{1}{4} \times 72000 = ₹ 18000 \text{ crore}$$

42. (1) Central angle for Silver

$$= 10\% \text{ of } 360^\circ = 36^\circ$$

43. (3) Ratio = Wheat : Silver : Rice

$$= 20 : 10 : 15 = 4 : 2 : 3$$

44. (2) Average value = $\frac{72000}{5} = ₹ 14400$ crore

45. (4) Rice + Crude Oil = 15% + 30% = 45%

$$\text{Textile} + \text{Wheat} = 25\% + 20\% = 45\%$$

46. (3) Average production (in thousand)

$$= \frac{1}{6} \times (30 + 46 + 60 + 70 + 50 + 80) = 56$$

The production during the years 2001, 2002 and 2004 was more than the average production.

47. (4) Average production

$$\text{for year 1999 and 2004} = \frac{30 + 80}{2} = 55$$

And average production

$$\text{for year 2001 and 2003} = \frac{60 + 50}{2} = 55$$

48. (3) $\text{Reqd \%} = \left(\frac{80 - 30}{30} \times 100 \right) = 166.6\%$

49. (2) $\text{Reqd \%} = \left(\frac{70 - 50}{70} \times 100 \right) = 28.6\%$

50. (1) % increase in production compared to the previous year

$$\text{in year 2000} = \frac{46 - 30}{30} \times 100 = 53.3\%$$

$$\text{in year 2002} = \frac{70 - 60}{60} \times 100 = 16.6\%$$

In year 2003 there is a decrease in production.

$$\text{In year 2004} = \left(\frac{80 - 50}{50} \times 100 \right) = 60\%$$

So, the maximum % increase is in the year 2004.