Directions for questions 1 to 5: The following table represents number of LED TV sets of different sizes (in inches) of five different TV companies A, B, C, D and E from 2012 to 2016. Study the table carefully and answer the questions that follow.

Size → / Years	A					B					C					D					E				
	19	26	32	40	46	19	26	32	40	46	19	26	32	40	46	19	26	32	40	46	19	26	32	40	46
2012	10	15	20	24	30	11	17	23	27	31	9	14	18	22	27	12	19	24	29	36	13	20	25	30	35
2013	9	12	15	22	29	10	15	23	26	30	8	14	17	20	26	11	18	23	28	35	12	18	24	27	34
2014	9	10	14	21	28	8	14	21	24	29	7	13	17	20	26	11	18	22	27	34	11	17	23	27	33
2015	8	10	12	20	25	7	12	19	22	28	6	12	15	19	25	9	18	22	27	30	11	17	22	26	32
2016	7	8	10	18	32	5	11	18	20	27	5	10	12	15	23	8	15	21	26	30	10	16	21	25	32

1. During the given period, how many units of 40 inch size LED TVs are sold by company C?

2. For company A the average sales of 46 inches LED TVs over the given period is:

3. The average sales of different sizes LED TVs for company B over the period is:

4. For the year 2014, what is the average sales of all LED TVs for all companies?

5. Which company sold the minimum number of TVs in the year 2013 considering all sizes?

Directions for questions 6 to 9: In a college, 150 students of MBA are enrolled. The ratio of boys to girls is 7:8. There are three disciplines, namely Marketing, HR and Finance, in the college. In Marketing discipline there are 50% girls of their total number and the boys are 40% of their total number. In HR discipline, girls are 30% of their total number while boys are 30% of their total number. Finance discipline has girls 20% of their total number and the boys are 30% of their total number. 7 boys and 9 girls are in HR and Marketing both. 6 boys and 7 girls are in HR and Finance both. 5 boys and 8 girls are in Marketing and Finance both. 2 boys and 3 girls are enrolled in all three disciplines. It is possible that some students are yet to decide their specialization.

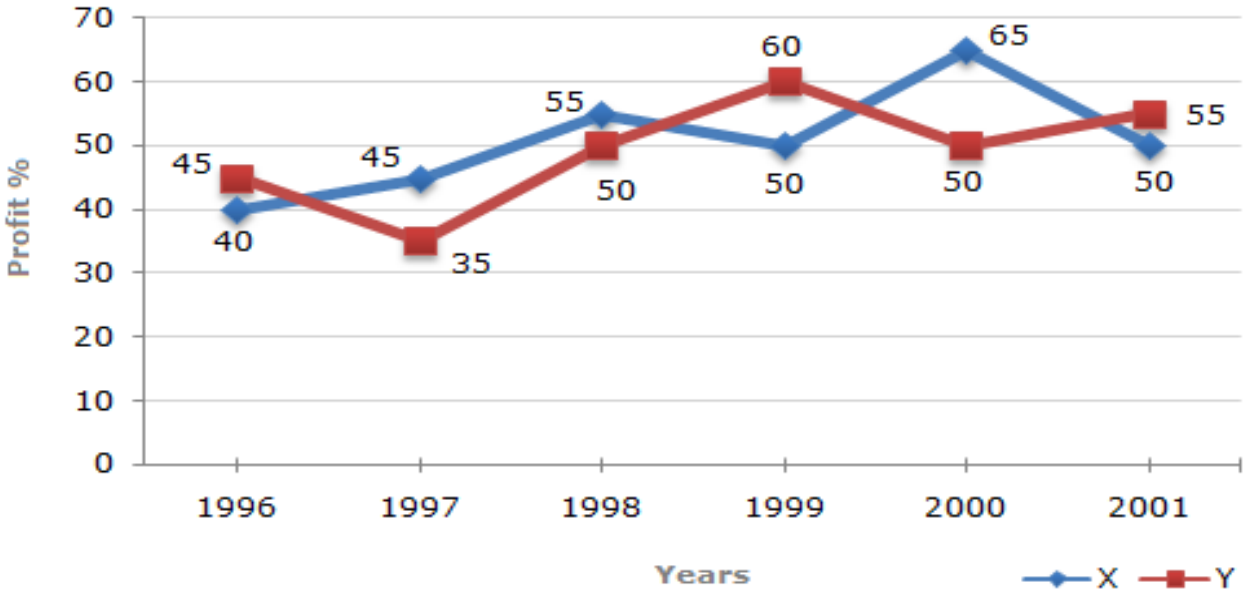
6. What percent of students have enrolled for only HR and Finance?

7. How many students have enrolled for exactly one specialization?

8. By what percent girls who have enrolled for Marketing and Finance only are more/less than boys enrolled in the same category?

9. What is the ratio of number of boys to that of girls who have enrolled for only Finance?

Directions for questions 10 to 13: The following line graph gives the percent profit earned by two Companies X and Y during the period 1996 - 2001.



Percentage profit earned by two companies X and Y over the given years
Profit = income - expenditure and profit % = (profit/expenditure)*100

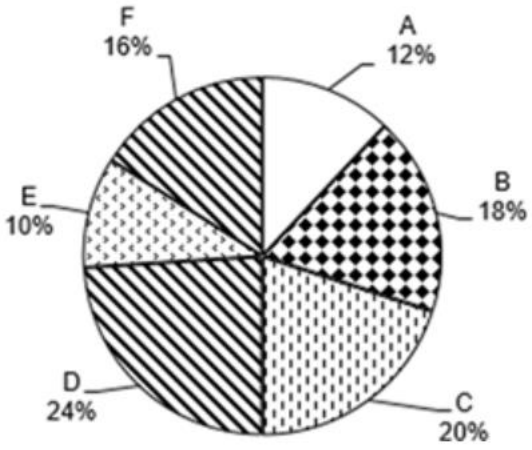
10. The incomes of two companies X and Y in 2000 were in the ratio of 3:4 respectively. What was the respective ratio of their expenditures in 2000?

11. If the expenditure of company Y in 1997 was ₹220 crore, what was its income in 1997?

12. If the expenditures of company X and Y in 1996 were equal and the total income of the two companies in 1996 was ₹342 crore, what was the total profit of the two companies together in 1996? (Profit = Income - Expenditure)

13. If the incomes of two companies were equal in 1999, then what was the ratio of expenditure of company X to that of company Y in 1999?

Directions for questions 14 to 18: Following pie chart gives the percentage of number of employees in six different departments A, B, C, D, E and F in an organization X between Jan 2019 and Dec 2020. Study the pie chart and answer the questions that follow. Assume that nobody left or joined any of these departments during the above period.



14. If the ratio of number of male and female employees in D and E is 5:3 and 3:2 respectively, and the difference between number of male employees in D and E is 54, what is the total number of employees in the organization?

15. The average number of employees in C and F is 216. If the number of females in E is 60% of males, find the number of female employees in E.

16. The number of female employees in departments A, B and D are equal and average number of employees in these departments is 1350. If the ratio of male employees in these three departments is 8:17:26, then find the ratio of male to female employees in department D.

17. A new department G is established in the organization. After hiring for G is done, number of employees in department E became 8.33% of the total employees. Number of employees in E is what percent of that in G?

18. If 900 employees joined department A in Jan 2021 and number of employees in remaining five departments were unchanged, percentage of employees on department B became 15% of total employees. Find the total number of employees after recruitment in department A.

Directions for questions 19 to 23: In a men's tennis tournament which is played on knockout basis, 64 players participate who are given ranks from 1 to 64 – called as seed#1 to seed#64. This tournament has following stages - first round, second round, third round, fourth round, the quarterfinals, the semifinals and the final. In the first round, the highest seeded player (seed #1) plays the lowest seeded player (seed # 64), the seed#2 player plays the seed#63 player, seed#3 player will play against seed#62 and so on for all players. Assuming that higher seeded player always beats the lower seeded player, a schedule for all subsequent rounds are chalked following the same method. i.e. in the second round, seed#1 player will play against seed#32 player, seed#2 player will play against seed#31 player and so on for all stages till final. However, if a lower seeded player beats a higher seeded player then it is termed as 'an upset'. In such case, the winner will play next match which was scheduled for his previous opponent. For e.g, if seed#1 player lost his match in round 1, then seed#64 player will play his round 2 match against seed#32 player, if seed#32 player wins his round 1 match.

19. If the final was played between the seed#5 player and seed#Y player, then Y can be -
(A) 13 (B) 7 (C) 4 (D) all of these

20. If top 6 players reach the quarter final stage then which of the following cannot be the seed of the player playing his final against seed#1 player in case he reaches final?
(A) 3 (B) 11 (C) 10 (D) 23

21. If the player seeded 55 won the tournament, then which of the following players cannot be the runner-up?
(A) 57 (B) 56 (C) 13 (D) 35

22. What can be the minimum number of upset matches a seed#18 player have to play to win the tournament?

23. If there are only 5 upsets in the entire tournament, then who could be the lowest seeded player to win the tournament?

Directions for questions 24 to 27: The Dean's office recently scanned student results into the central computer system. When their character reading software cannot read something, it leaves the space blank. The scanner output reads as follows:
In the grading system, A, B, C, D, and F grades fetch 6, 4, 3, 2, and 0 grade points respectively. The Grade Point Average (GPA) is the arithmetic mean of the grade points obtained in the five subjects. For example, Nisha's GPA is (6+2+4+6+0)/5 = 3.6

Name	Finance	Marketing	Statistics	Strategy	Operations	GPA
Aparna	F	B	F	F		1.4
Bikas	D	D	F	F		
Chandra		D	A	F	F	2.4
Deepak	A	B		D	D	3.2
Fazal	D	F	B	B	D	2.4
Gowri	C	C	A		B	3.8
Hari		B	A		D	2.8
Ismet			B		A	
Jagdeep	A	A	B		C	3.8
Kunal	F		A	F	F	1.8
Leena	B	A		B	F	3.2
Manab			A	B	B	
Nisha	A	D	B	A	F	3.6
Osman	C		B	B	A	4.6
Preeti	F	D		D		3.2
Rahul	A	C	A		F	4.2
Sameer		C	F	B		
Tara	B	B	B	B	F	2.4
Utkarsh	C	B	F	C	A	3.0
Vipul	A	F	C	C	F	2.4

Some additional facts are also known about the students' grades. These are:
a. Vipul obtained the same grade in Marketing as Aparna obtained in Finance and Strategy.
b. Fazal obtained the same grade in Strategy as Utkarsh did in Marketing.
c. Tara received the same grade in exactly three courses.

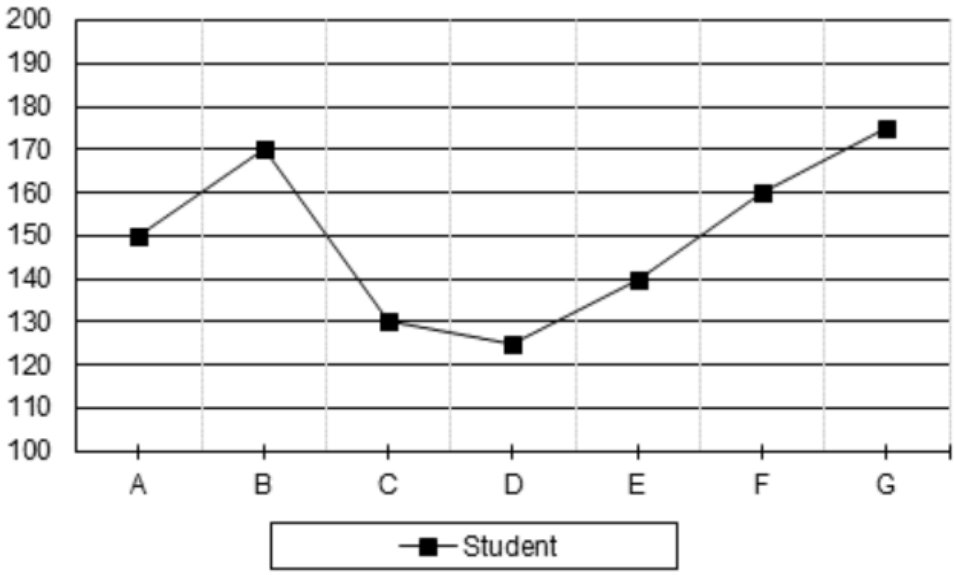
24. In Operations, Tara could have received the same grade as ___.
(A) Ismet (B) Hari (C) Jagdeep (D) Manab

25. What grade did Preeti obtain in Statistics? A

26. What grade did Utkarsh obtain in Finance? C

27. In Strategy, Gowri's grade point was higher than that obtained by ___.
(A) Fazal (B) Hari (C) Nisha (D) Rahul

Directions for questions 28 to 32: Following line graph shows marks scored by seven students A, B, C, D, E, F and G as percentage of passing marks in an examination. Study the graph carefully and answer the questions that follow.



28. If average marks scored by A, D and G is 135 and passing marks are 42.84% of maximum marks, find the maximum marks.

29. If maximum marks of the examination are 150 and the average marks scored by B and C are 90, then marks scored by E are what percentage of maximum marks of the exam?

30. If passing marks of the examination are 42 and equal to 35% of the maximum marks then average marks of all seven students is how much less than the highest marks obtained by a student?

31. If maximum marks are 80% more than passing marks of the examination then marks scored by F are what percent of maximum marks of the examination?

32. If passing marks are 28 less than that scored by E and 44% less than the maximum marks, find the percentage marks obtained by C.

Directions for questions 33 to 37: The following chart shows the number of employees in four companies- Microsoft, Samsung, Amazon and Google. Each company has male and female employees, out of which, some are married and some are unmarried. Some values are missing in the table. Find the values on the basis of given information and answer accordingly.

Company	Total employees	Male	Female	Married Male	Unmarried Male	Married Female	Unmarried female
Microsoft	756	526	-	325	-	-	-
Samsung	-	-	-	215	-	254	-
Amazon	-	159	-	-	-	-	-
Google	224	142	82	-	-	-	-

33. If the number of unmarried females in Microsoft is 2 more than half the number of married females in the same company, find the difference between the unmarried males in Microsoft and unmarried females in Microsoft.

34. The number of the unmarried males in Samsung is 26 more than the number of married males in the same company. The number of unmarried males are more than unmarried females in Samsung by 122. Find the total number of employees in Samsung.

35. Number of females in Amazon is 147 more than the number of females in Microsoft. If the sum of married males and married females in Amazon is 115, then find the sum of unmarried males and unmarried females in Amazon.

36. If in Microsoft, the total number of employees is 40% more than that of the Amazon and the ratio between the number of unmarried females in Google to the total number of employees in Amazon is 1:18, then find the total number of unmarried females in Google.

37. The number of married females and unmarried females in Google are equal. If the number of married males in Google is 5 more than the number of married females in Google, then find the difference between unmarried males and unmarried females in Google.

Directions for questions 38 to 42: Following table depicts the data pertaining to the details of the parcel sent using different courier services and corresponding costs. Study the data carefully and answer the questions that follow.

→ Types of service / Year ↓	Normal delivery		Express delivery		Priority delivery	
	Number of parcels	Cost per parcel	Number of parcels	Cost per parcel	Number of parcels	Cost per parcel
2012	120	20	110	22	90	30
2013	240	22	220	24	140	34
2014	90	25	80	30	50	45
2015	100	24	90	28	70	50
2016	130	26	100	28	90	60
2017	70	30	70	32	60	55

38. In which year the total expenses incurred on sending the parcels were the lowest?

39. The amount spent of sending parcels in express delivery in 2017 is what percent of that spent of sending parcels in priority delivery in 2013?

40. What is the ratio of amount spent on sending parcels via Normal delivery in 2013 to that spent on sending parcels by express services in 2012 and 2014 together?

41. For how many years the cost of sending parcels via express delivery was higher than that spent on the other two services individually?

42. What was the average cost per parcel for normal delivery considering all years together?

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