Temple of Learning
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Data Interpretation

Bar graphs

Pie chart

Line Graph

Tables Charts

Bar graphs

Bar graphs are the pictorial representation of data (generally grouped), in the form of vertical or horizontal rectangular bars, where the length of bars are proportional to the measure of data. They are also known as bar charts.

The types of bar charts are as follows:

1. Vertical bar chart
2. Horizontal bar chart

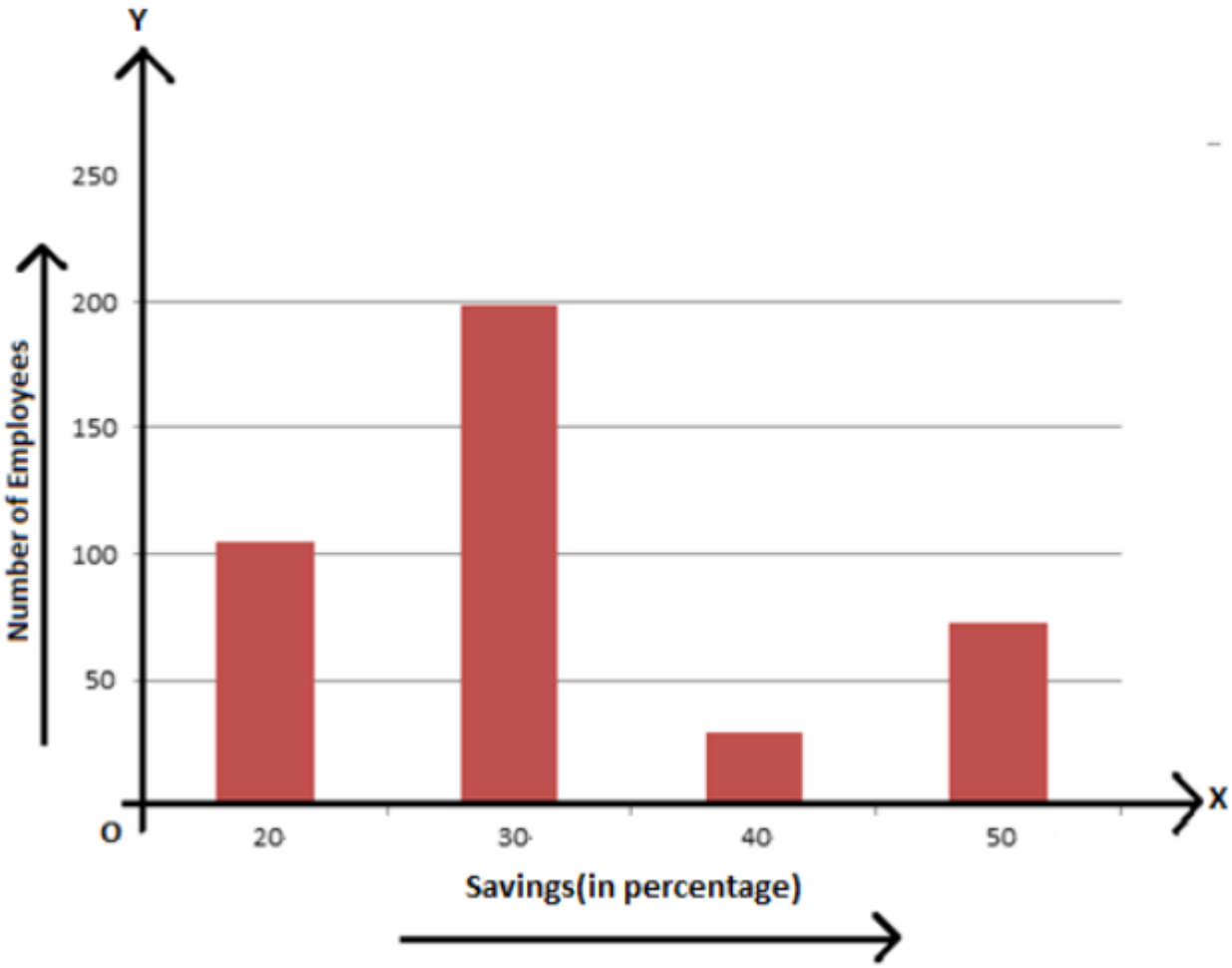
Bar Graph Examples

Example 1: In a firm of 400 employees, the percentage of monthly salary saved by each employee is given in the following table. Represent it through a bar graph.

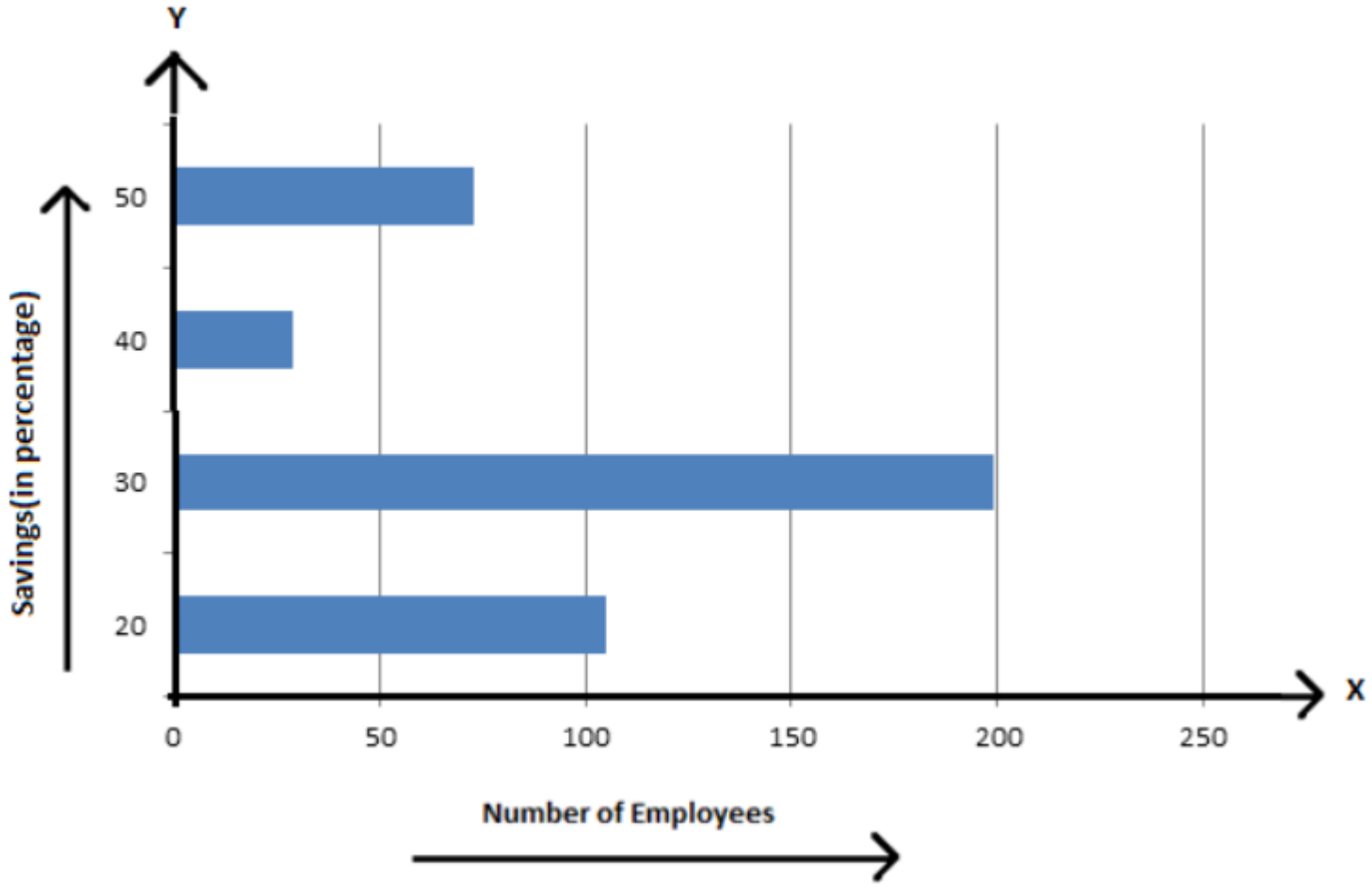
Savings (in percentage)	Number of Employees(Frequency)
20	105
30	199
40	29
50	73
Total	400

Solution: The given data can be represented as

Table 1 Vertical Bar Graph



This can also be represented using a horizontal bar graph as follows:



Pie chart

A **pie chart** is a type of graph that represents the data in the circular graph. The "**pie chart"** also is known as "circle chart", that divides the circular statistical graphic into sectors or slices in order to illustrate the numerical problems. Each sector denotes a proportionate part of the whole. To find out the composition of something, Pie-chart works the best at that time. In most of the cases, pie charts replace some other graphs like the bar graph, line plots, histograms etc.

Formula

The pie chart is an important type of data representation. It contains different segments and sectors in which each segment and sectors of a pie chart forms a certain portion of the total(percentage). The total of all the data is equal to 360°.

Example - Imagine you survey your friends to find the kind of movie they like best:

Table: Favorite Type of Movie

Comedy	Action	Romance	Drama	SciFi
4	5	6	1	4

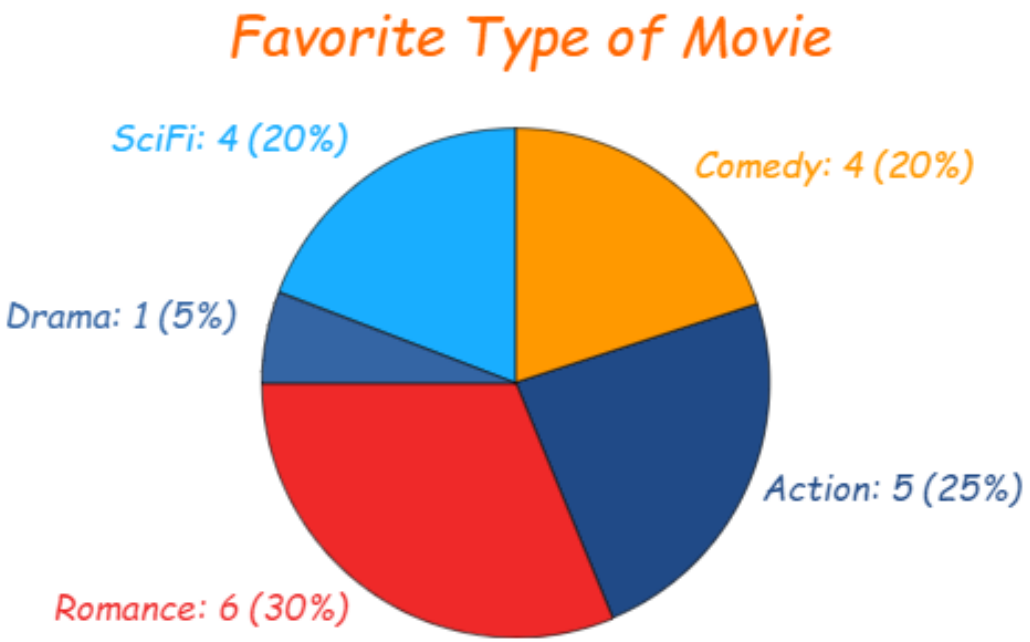
You can show the data by this Pie Chart:

Next, divide each value by the total and multiply by 100 to get a percent:

Comedy	Action	Romance	Drama	SciFi	TOTAL
4	5	6	1	4	**20**
4/20 = **20%**	5/20 = **25%**	6/20 = **30%**	1/20 = **5%**	4/20 = **20%**	**100%**

A Full Circle has **360 degrees**, so we do this calculation:

Comedy	Action	Romance	Drama	SciFi	TOTAL
4	5	6	1	4	**20**
20%	**25%**	**30%**	**5%**	**20%**	**100%**
4/20 × 360° = **72°**	5/20 × 360° = **90°**	6/20 × 360° = **108°**	1/20 × 360° = **18°**	4/20 × 360° = **72°**	**360°**



Line Graph

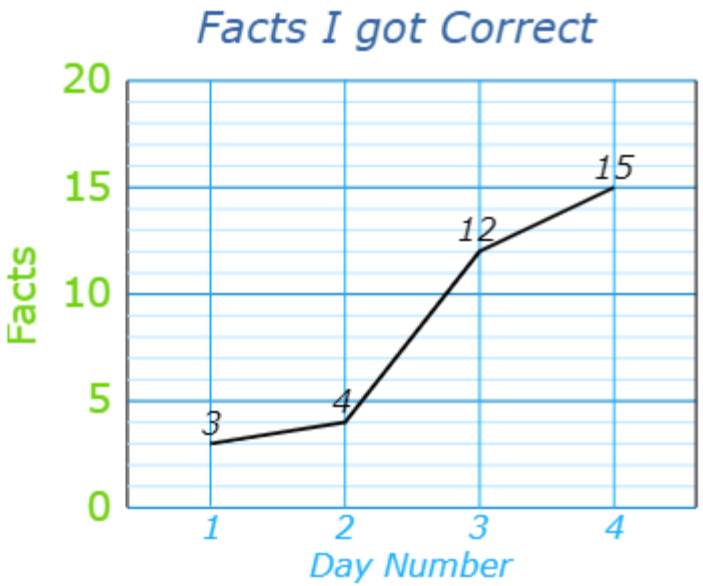
A line graph is a type of chart used to show information that changes over time. We plot line graphs using several points connected by straight lines. We also call it a line chart. The line graph comprises of two axes known as ‘x’ axis and ‘y’ axis.

- The horizontal axis is known as the x-axis.
- The vertical axis is known as the y-axis.

Example -You are learning facts about dogs, and each day you do a short test to see how good you are. These are the results:

Table: Facts I got Correct			
Day 1	**Day 2**	**Day 3**	**Day 4**
3	4	12	15

And here is the same data as a Line Graph:



You seem to be improving!

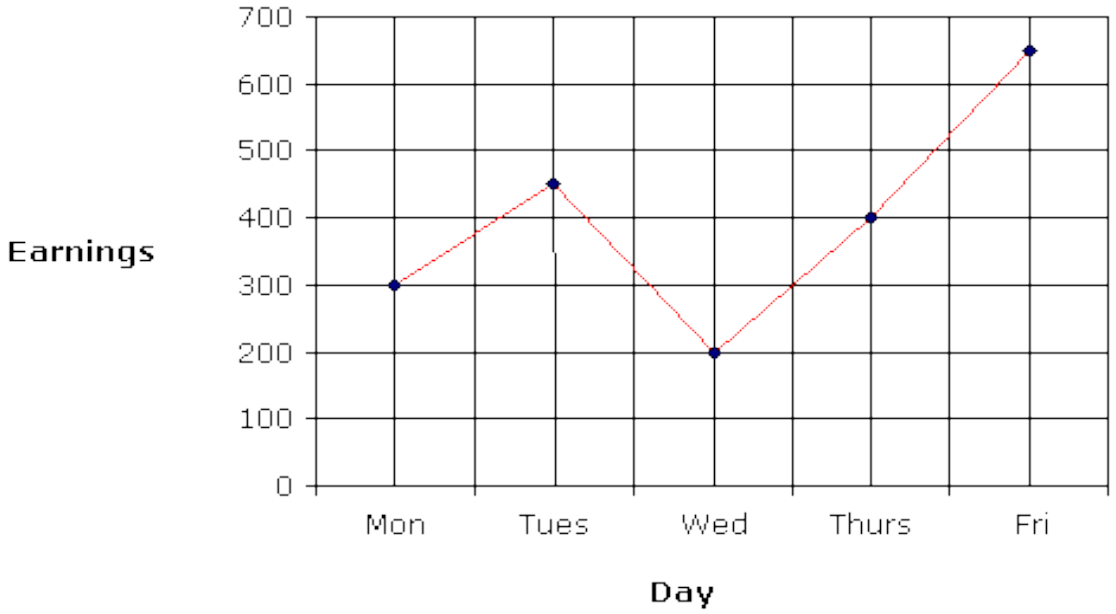
Example:
The table shows the daily earnings of a store for five days.

a) Construct a line graph for the frequency table.
b) On which days were the earnings above $ 400

Day	Mon	Tues	Wed	Thurs	Fri
Earnings	300	450	200	400	650

Solution:

a)



b) The earnings were above $ 400 on Tuesday and Friday.

Tables Charts

A table is a set of facts and figures arranged in columns and rows and is a very useful way of organizing numerical information or data.

Study the table and answer the questions:
The table given here

Year	English		Maths		Science		Social Science	
	High.	Ave.	High.	Ave.	High.	Ave.	High.	Ave.
2007	80	70	94	60	89	70	65	55
2008	82	65	85	62	95	64	66	58
2009	71	56	92	68	97	68	68	48
2010	75	52	91	64	92	75	77	58

Example - What is the overall average of marks in the four subjects in the year 2009?

A.63
B.64
C.65
D.60

Answer: Option D

Solution:

Average in four subjects,= 56+68+68+48 / 4 = 240 / 4 =60

Another Example - Supposing that there were 40 students in science in the year 2009. How much total of marks did they receive combined together?

A.2800
B.2720
C.2560
D.3000

Year	English		Maths		Science		Social Science	
	High.	Ave.	High.	Ave.	High.	Ave.	High.	Ave.
2007	80	70	94	60	89	70	65	55
2008	82	65	85	62	95	64	66	58
2009	71	56	92	68	97	68	68	48
2010	75	52	91	64	92	75	77	58

Answer: Option B

Solution:

Total marks

$= 40 \times 68$

$= 2720$

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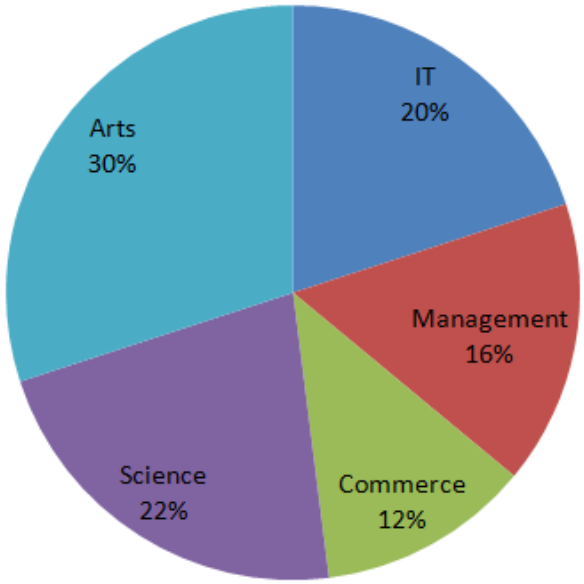
Data Interpretation Practice MCQs

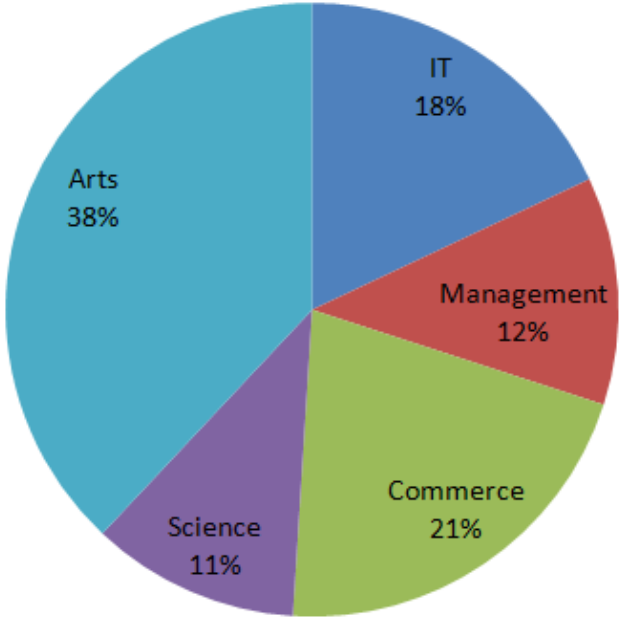
Directions (1 - 5): **Study the following pie-charts carefully and answer the questions that follow:**

Percentage of Students Enrolled in Different Streams in a College.
Total Number of Students = 3500.

Percentage Break-up of Girls Enrolled in These Streams Out of The Total Students.
Total Number of Girls = 1500.



Students (3500)



Girls (1500)

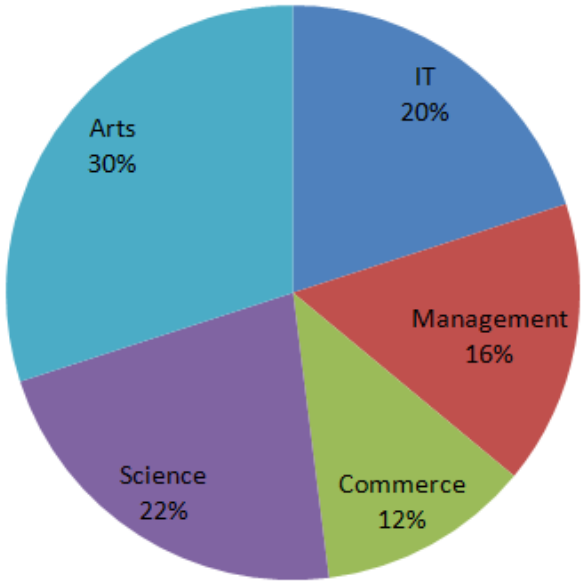
1. What is the ratio of the number of girls enrolled in Arts to the number of boys enrolled in Science?

A.14 : 23

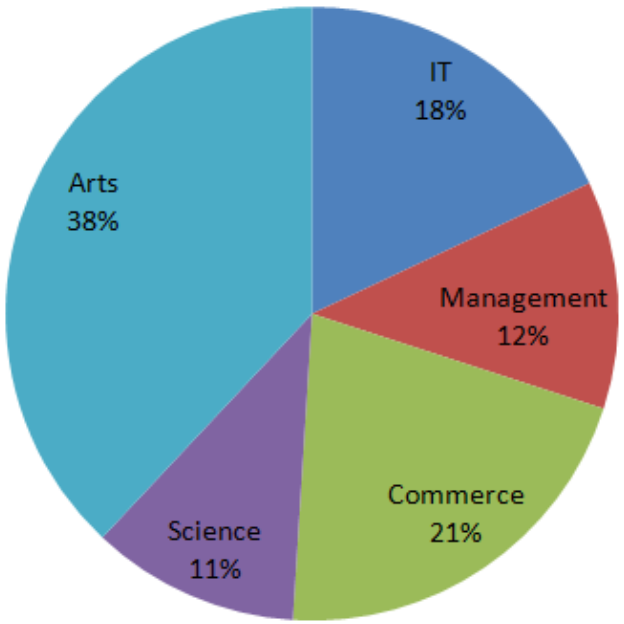
B.2 : 3

C.114 : 121

D.53 : 65



Students (3500)



Girls (1500)

Answer: Option C

Solution:

Number of students enrolled in various streams:

$$\text{IT} \rightarrow \frac{20}{100} \times 3500 = 700$$

$$\text{Arts} \rightarrow \frac{30}{100} \times 3500 = 1050$$

$$\text{Science} \rightarrow \frac{22}{100} \times 3500 = 770$$

$$\text{Commerce} \rightarrow \frac{12}{100} \times 3500 = 420$$

$$\text{Management} \rightarrow \frac{16}{100} \times 3500 = 560$$

Number of girls enrolled in various streams:

$$\text{IT} \rightarrow \frac{18}{100} \times 1500 = 270$$

$$\text{Arts} \rightarrow \frac{38}{100} \times 1500 = 570$$

$$\text{Science} \rightarrow \frac{11}{100} \times 1500 = 165$$

$$\text{Commerce} \rightarrow \frac{21}{100} \times 1500 = 315$$

$$\text{Management} \rightarrow \frac{12}{100} \times 1500 = 180$$

(Number of girls enrolled in Arts) : (Number of boys enrolled in Science)

= 570 : (770 - 165)

= 570 : 605

= 114 : 121

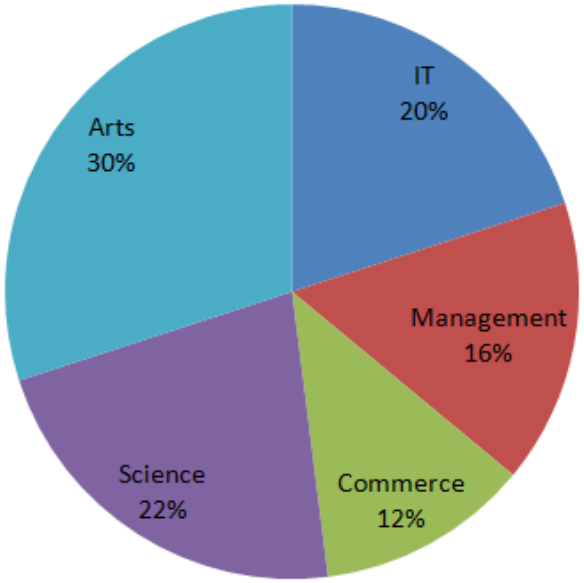
2. The number of girls enrolled in Arts, Science and Commerce forms what percent of total number of students in the college?

A.25%

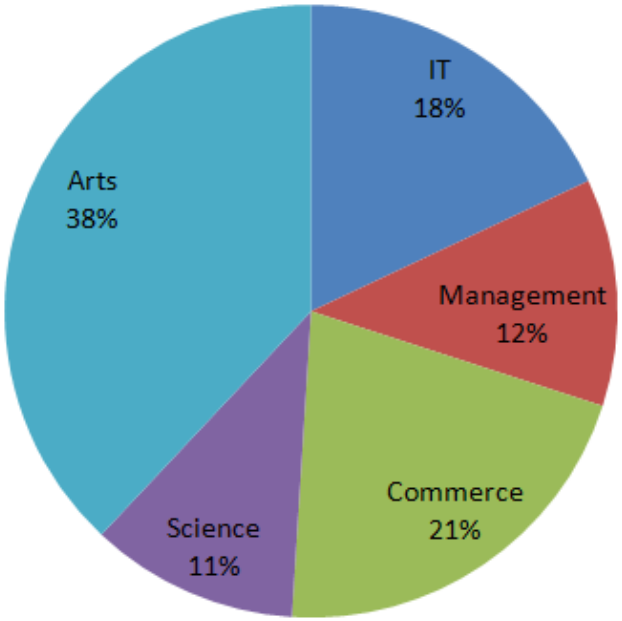
B.40%

C.60%

D.None of these



Students (3500)



Girls (1500)

Answer: Option **D.**

Solution:

Number of students enrolled in various streams:

$$\text{IT} \rightarrow \frac{20}{100} \times 3500 = 700$$

$$\text{Arts} \rightarrow \frac{30}{100} \times 3500 = 1050$$

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$$\text{Commerce} \rightarrow \frac{21}{100} \times 1500 = 315$$

$$\text{Management} \rightarrow \frac{12}{100} \times 1500 = 180$$

Number of girls enrolled in Arts, Science and Commerce

= 570 + 165 + 315

= 1050

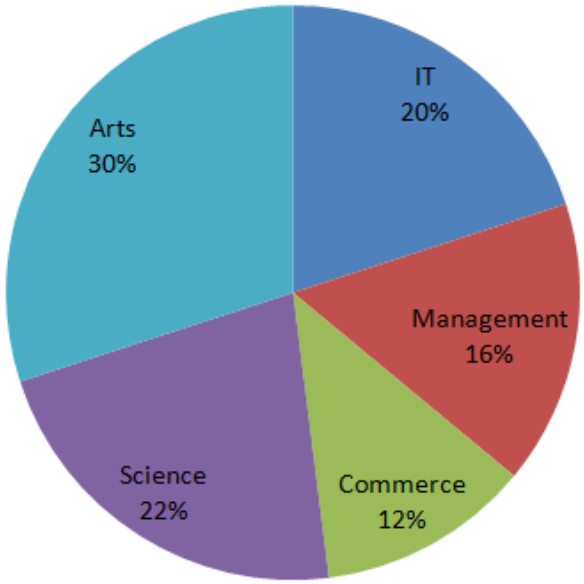
Required percentage

$$= \left(\frac{1050}{3500} \times 100\right)\%$$

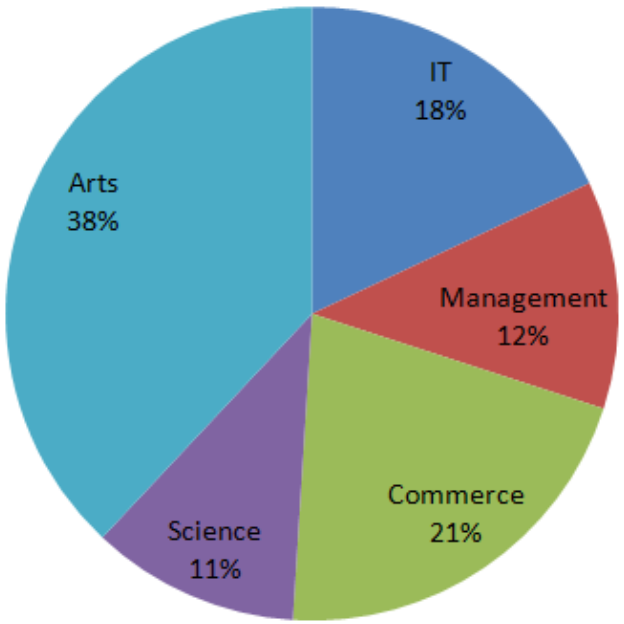
$$= 30\%$$

3. What is the total number of girls enrolled in Science and Commerce together?

A.450
B.495
C.345
D.480



Students (3500)



Girls (1500)

Answer: Option D

Solution:

Number of students enrolled in various streams:

$$\text{IT} \rightarrow \frac{20}{100} \times 3500 = 700$$

$$\text{Arts} \rightarrow \frac{30}{100} \times 3500 = 1050$$

$$\text{Science} \rightarrow \frac{22}{100} \times 3500 = 770$$

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Number of girls enrolled in various streams:

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$$\text{Commerce} \rightarrow \frac{21}{100} \times 1500 = 315$$

$$\text{Management} \rightarrow \frac{12}{100} \times 1500 = 180$$

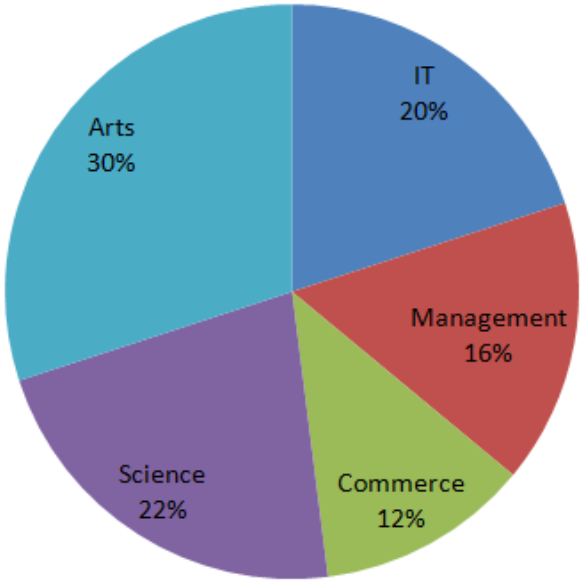
Total number of girls enrolled in Science and Commerce together

= 165 + 315

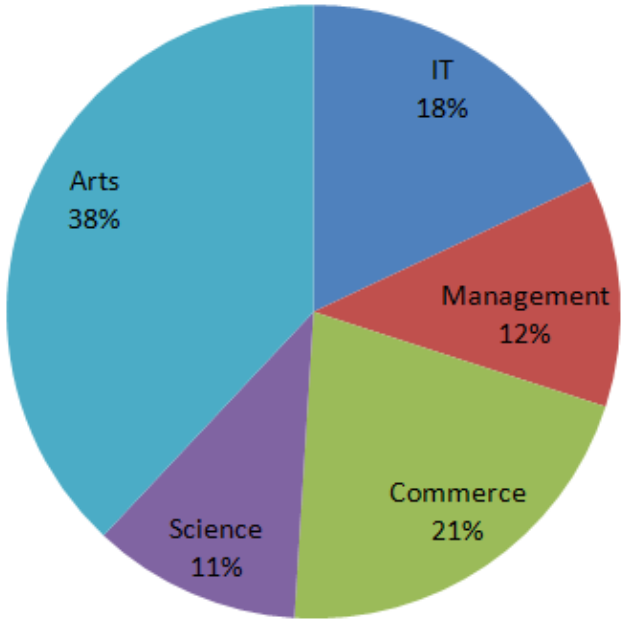
= 480

4. What is the total number of boys enrolled in Management and IT together?

A.1050
B.810
C.1120
D.980



Students (3500)



Girls (1500)

Answer: Option B

Solution:

Number of students enrolled in various streams:

$$\text{IT} \rightarrow \frac{20}{100} \times 3500 = 700$$

$$\text{Arts} \rightarrow \frac{30}{100} \times 3500 = 1050$$

$$\text{Science} \rightarrow \frac{22}{100} \times 3500 = 770$$

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Number of girls enrolled in various streams:

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$$\text{Science} \rightarrow \frac{11}{100} \times 1500 = 165$$

$$\text{Commerce} \rightarrow \frac{21}{100} \times 1500 = 315$$

$$\text{Management} \rightarrow \frac{12}{100} \times 1500 = 180$$

Total number of boys enrolled in Management and IT together

= (560 - 180) + (700 - 270)

= 380 + 430

= 810

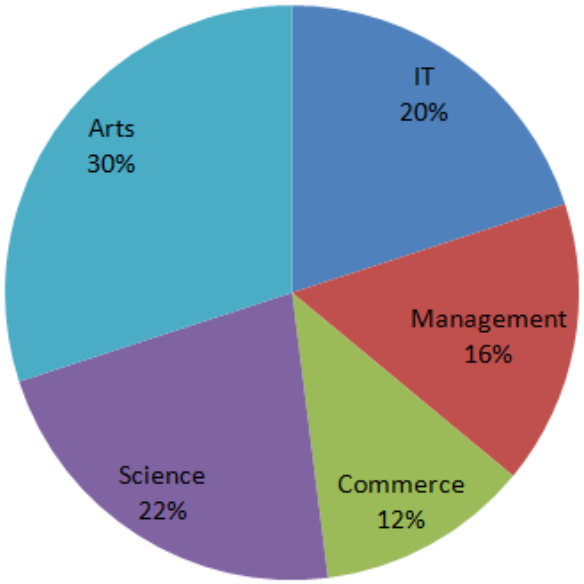
5. If 20% of the girls enrolled in science change their stream to Management, then what will be the new number of Management students altogether?

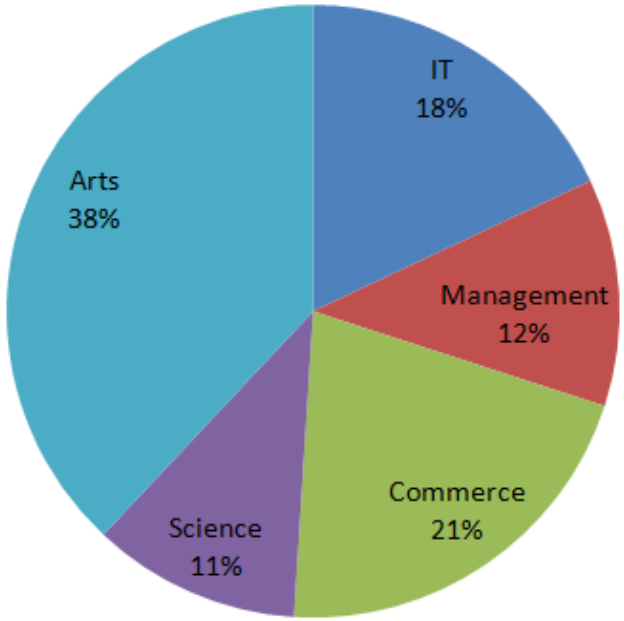
A.593

B.733

C.453

D.100





Answer: Option A

Solution:

Number of students enrolled in various streams:

$$\text{IT} \rightarrow \frac{20}{100} \times 3500 = 700$$

$$\text{Arts} \rightarrow \frac{30}{100} \times 3500 = 1050$$

$$\text{Science} \rightarrow \frac{22}{100} \times 3500 = 770$$

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$$\text{Commerce} \rightarrow \frac{21}{100} \times 1500 = 315$$

$$\text{Management} \rightarrow \frac{12}{100} \times 1500 = 180$$

Number of Management students already enrolled = 560

New required number

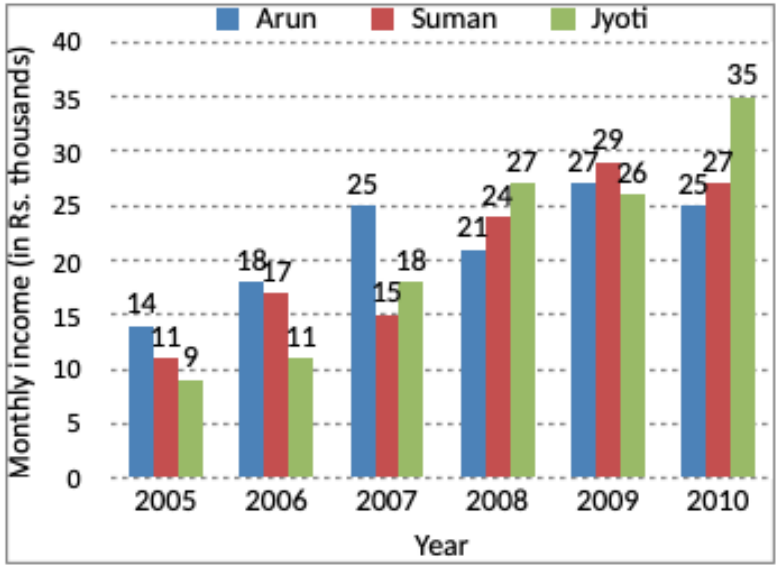
$$= 560 + \left(\frac{20}{100} \times 165\right)$$

$$= 560 + 33$$

$$= 593$$

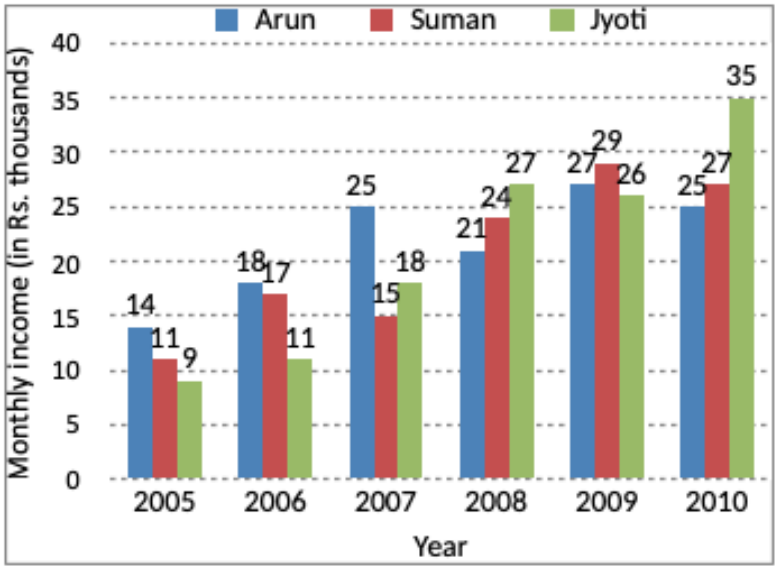
<u>Directions (6 - 10):</u> Study the following graph carefully to answer the questions that follow:

Monthly income (Rs. in thousands) of three different persons in six different years



6. Monthly income of Suman in the year 2009 was approximately what percentage of the monthly income of Jyoti in the year 2010 ?

A.72%
B.89%
C.83%
D.67%



Answer: **Option C**

Solution:

Monthly income of Suman in year 2009 = Rs. 29000

Monthly income of Jyoti in year 2010 = Rs. 35000

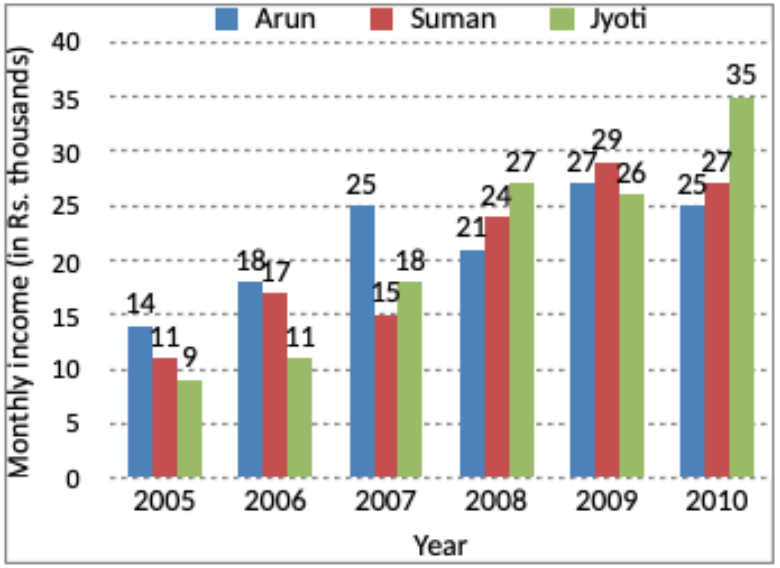
$$= \frac{29000}{35000} \times 100$$

$$= 82.85$$

$$\approx 83\%$$

7. What was the different between the total monthly salary of Arun in all the years together and Suman's monthly income in the year 2007?

A.Rs. 1.24 lakhs
B.Rs. 1.13 lakhs
C.Rs. 11.4 lakhs
D.Rs. 12.4 lakhs



Answer: **Option B**

Solution:

Total monthly salary of Arun in all the years

= 14000 + 18000 + 23000 + 21000 + 27000 + 25000

= Rs. 128000

Monthly salary of Suman in the year 2007 = Rs. 15000

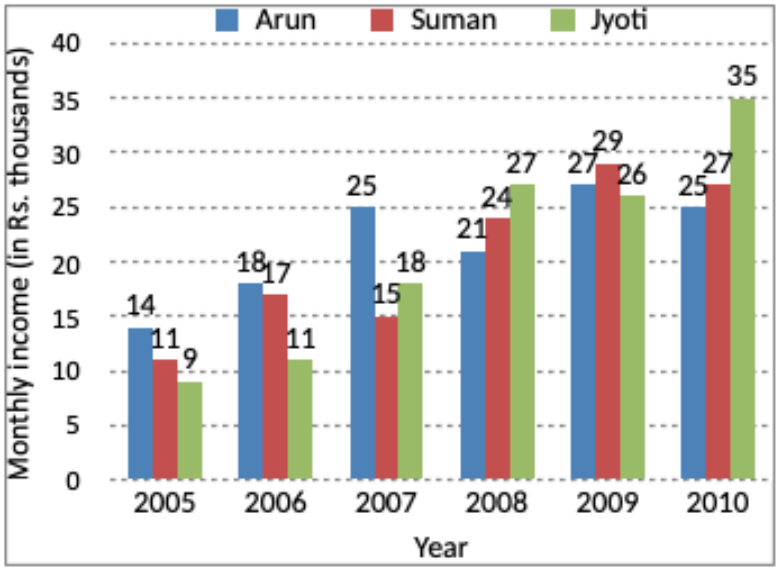
Difference between their Salary

= 128000 - 15000

= Rs. 1.13 lakh

8. In which year was the difference between Jyoti's monthly income and Arun's monthly income second highest ?

A.2005
B.2006
C.2007
D.2009



Answer: **Option B**

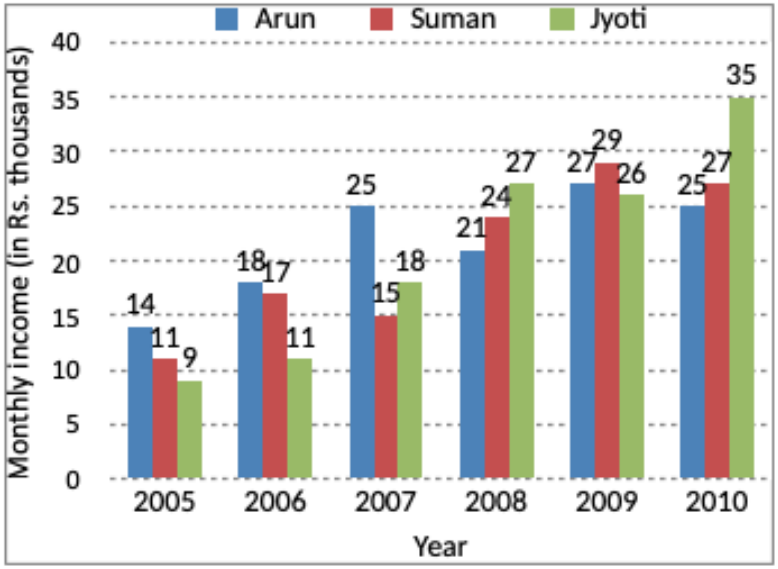
Solution:

Year	Arun's income	Jyoti's income	Difference
2005	14000	9000	5000
2006	18000	11000	7000
2007	23000	18000	5000
2008	21000	27000	6000
2009	27000	26000	1000
2010	25000	35000	10000

In 2006 difference between Jyoti's monthly income and Arun's monthly income second highest.

9. What was the percentage increase in the monthly income of Jyoti in the year 2008 as compared to previous year ?

A.50%
B.89%
C.83%
D.67%



Answer: Option A

Solution:

Jyoti's income in 2008 = Rs. 27000

Jyoti's income in 2007 = Rs. 18000

$\therefore$ Increase percentage

$$= \frac{2700 - 1800}{18000} \times 100$$

$$= \frac{9000}{18000} \times 100$$

$$= 50\%$$

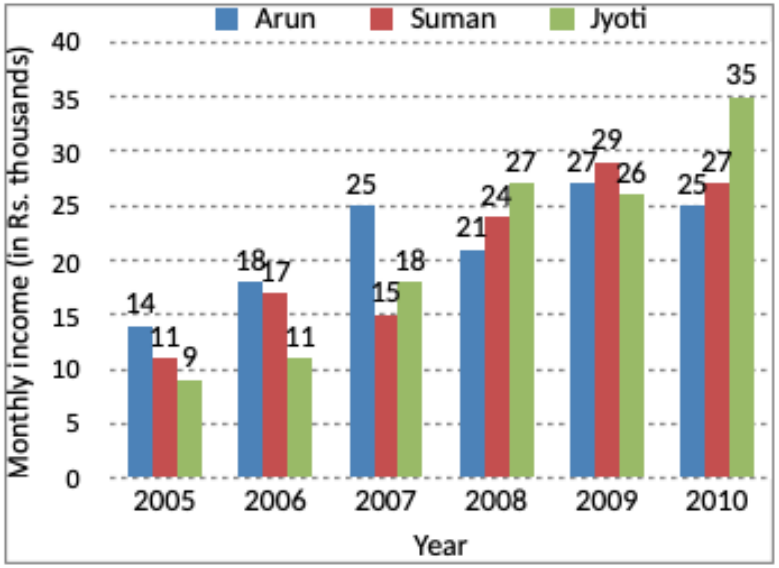
10. What is the respective ratio between Arun's monthly income in the year 2006, Suman's monthly income in the year 2007 and Jyoti's monthly income in the year 2005?

A.6 : 3 : 5

B.5 : 6 : 4

C.5 : 4 : 7

D.None of these

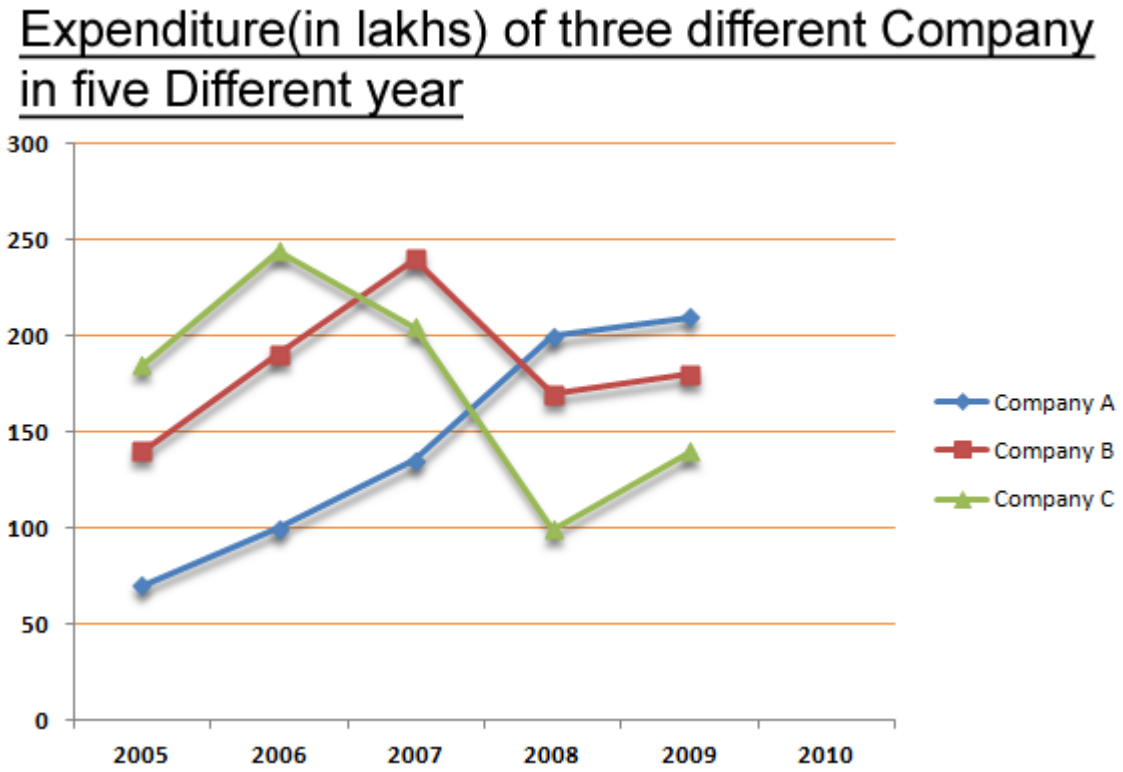


Answer: **Option D**

Solution:

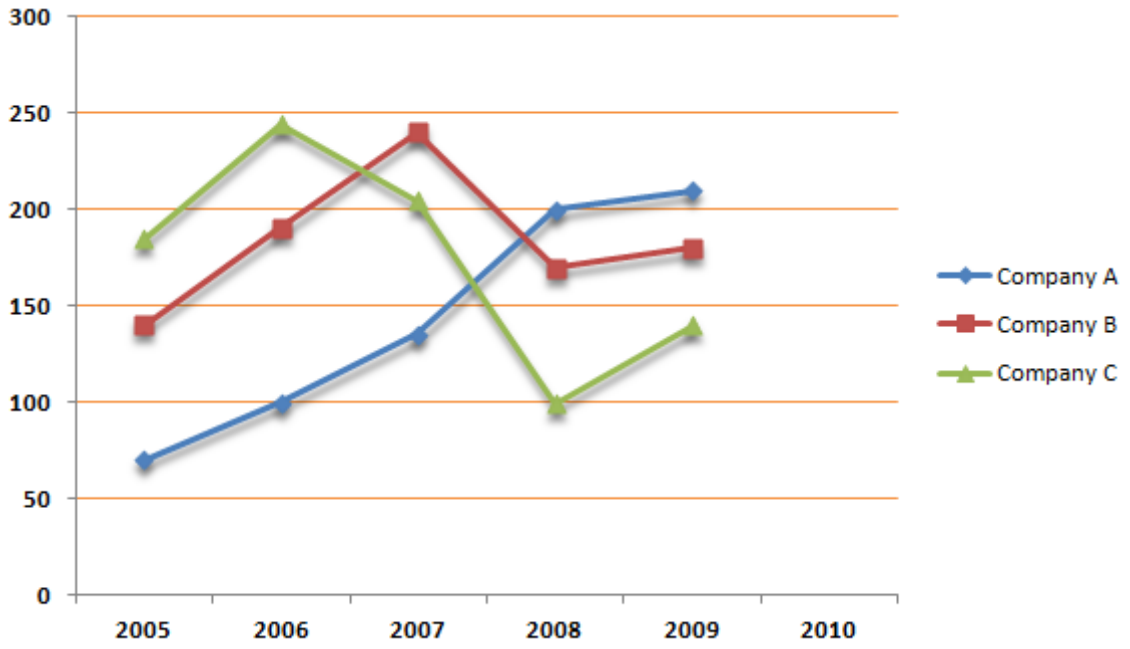
In year 2006 Arun's salary	In year 2007 Suman's salary	In year 2005 Jyoti's salary
18000	15000	9000
18	15	9
6	5	3

Directions (11 - 13): Study the graph and answer the questions:



11. What was the overall average expenditure of Company C in all the years together?

A.Rs. 190 lakhs
B.Rs. 120 lakhs
C.Rs. 180 lakhs
D.Rs. 150 lakhs



Answer: Option C

Solution:

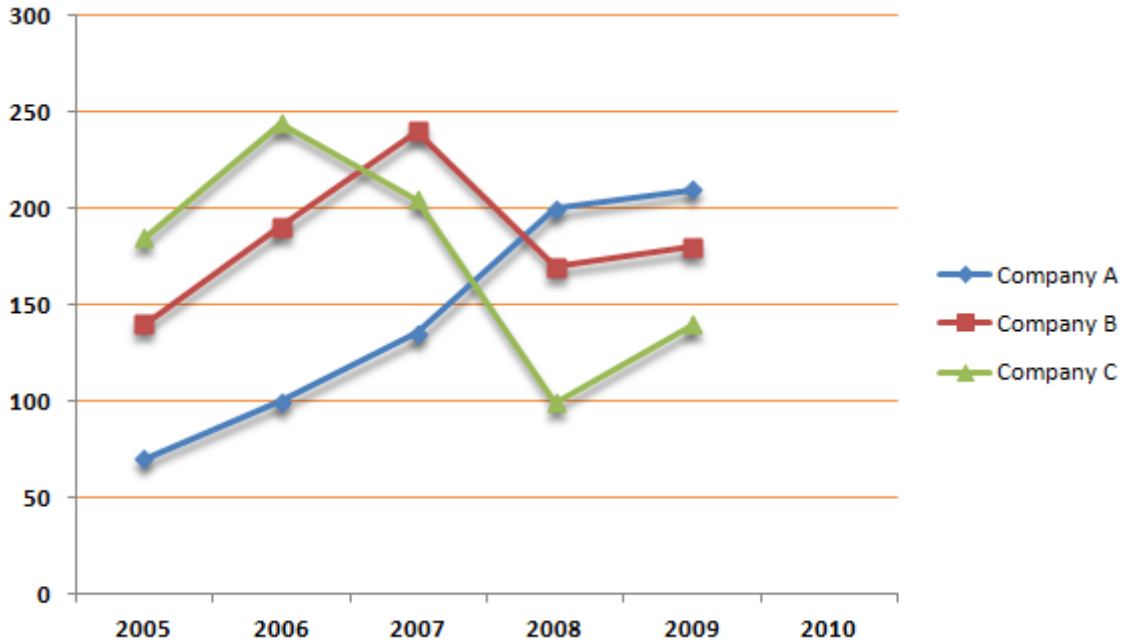
$$\text{Required average expenditure,}$$

$$= \frac{200 + 250 + 210 + 100 + 140}{5}$$

$$= \text{Rs. } 180 \text{ lakhs}$$

12. What was the difference between the total expenditure of company B in the year 2006 and 2008 together and the total expenditure of company C in the year 2007 and 2009 together?

A.Rs. 1000000
B.Rs. 100000
C.Rs. 10000000
D.Rs. 100000000



Answer: Option A

Solution:

Required difference,

= Rs. [(190 + 170) - (210 + 140)] lakh

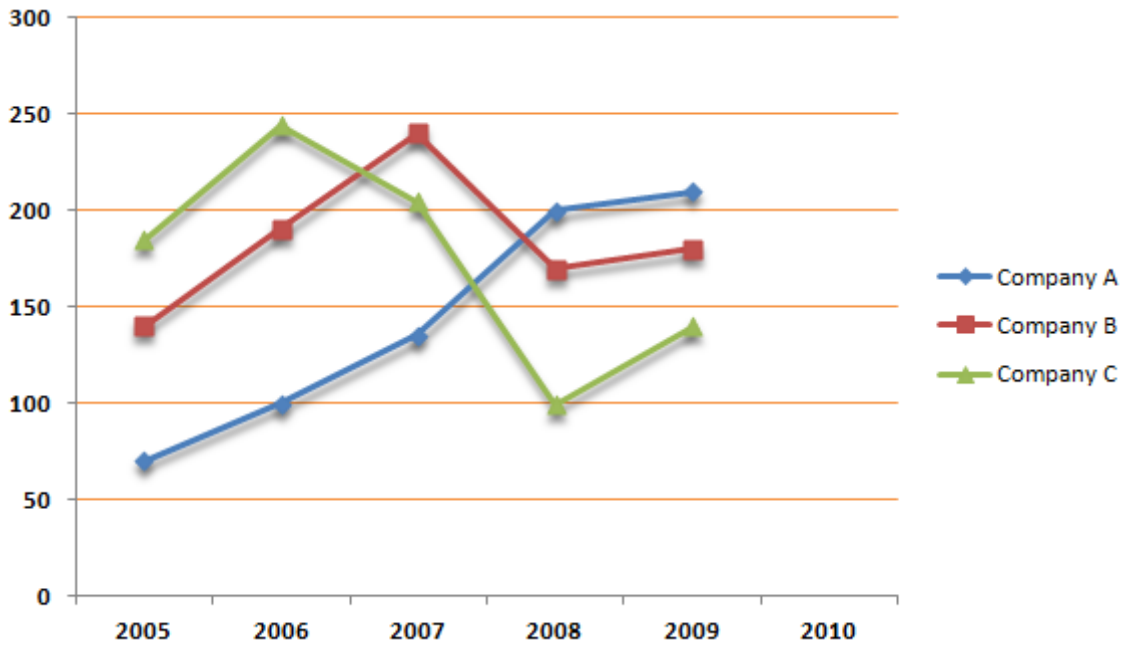
= Rs. [360 - 350]

= Rs. 10 lakh

= Rs. 1000000

13. What was the respective ratio between the expenditure of company A in the year 2009 and expenditure of company B in the year 2005?

A.5 : 3
B.3 : 4
C.3 : 5
D.3 : 2



Answer: Option D

Solution:

Required Ratio

= 210 : 140

= 3 : 2

<u>Directions (14 - 16)</u>: The proportion of male student and proportion of vegetarian in a school are given below. The school has a total of 800 students, 80% of whom are in the Secondary Section and rest equally divided between Class 11 and 12.

	Male (M)	Vegetarian (V)
Class 12	0.60	
Class 11	0.55	0.50
Secondary Section		0.55
Total	0.475	0.53

14. What is the percentage of vegetarian students in class 12?

A.40
B.45
C.50
D.55

	Male (M)	Vegetarian (V)
Class 12	0.60	
Class 11	0.55	0.50
Secondary Section		0.55
Total	0.475	0.53

Answer: Option A

Solution:

Total Students = 800

No. of students in secondary = 80% of 800 = 640

Rest Students = 800 - 640 = 160

Rest students are divided equally into class 12 and 11. So,

No. of students in class 12 = $\frac{160}{2}$ = 80

Now, total vegetarian = 53%

No. of Total vegetarian = 53% of 800 = 424

55% of secondary students are vegetarian.

No. of vegetarian in secondary = 55% of 640 = 352

No. vegetarian in 11 = 50% of 80 = 40

Thus, no. of vegetarian in 12,

= 424 - 352 - 40 = 32

Thus,

In class 12 total vegetarian = 32.

So, % of vegetarian = $\frac{32}{80} \times 100 = 40\%$

15. In class 12, twenty five percent of the vegetarian are male. What is the difference between number of female vegetarian and male non-vegetarian?

A.10
B.12
C.14
D.16

	Male (M)	Vegetarian (V)
Class 12	0.60	
Class 11	0.55	0.50
Secondary Section		0.55
Total	0.475	0.53

Answer: Option D

Solution:

Male vegetarian = 32 - 8 = 24

Difference = 24 - 8 = 16

16. What is the percentage of male students in Secondary Section?

A.40
B.45
C.50

	Male (M)	Vegetarian (V)
Class 12	0.60	
Class 11	0.55	0.50
Secondary Section		0.55
Total	0.475	0.53

Answer: Option B

Solution:

% of male students in secondary section,

$$= \frac{288}{640} \times 100 \quad [\because 800 \times 80\% = 640]$$

$$= 45\%$$

Q. 17 Study the following table and answer the question.

Classification of 100 Students Based on the Marks Obtained by them in Physics and Chemistry in an Examination.

Subject	Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average (Aggregate)	7	27	73	87	100

17. What is the different between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

A.3
B.4
C.5
D.6

Subject	Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average (Aggregate)	7	27	73	87	100

Answer: Option **D**

Explanation:

Required difference

= (No. of students scoring 30 and above marks in Chemistry)

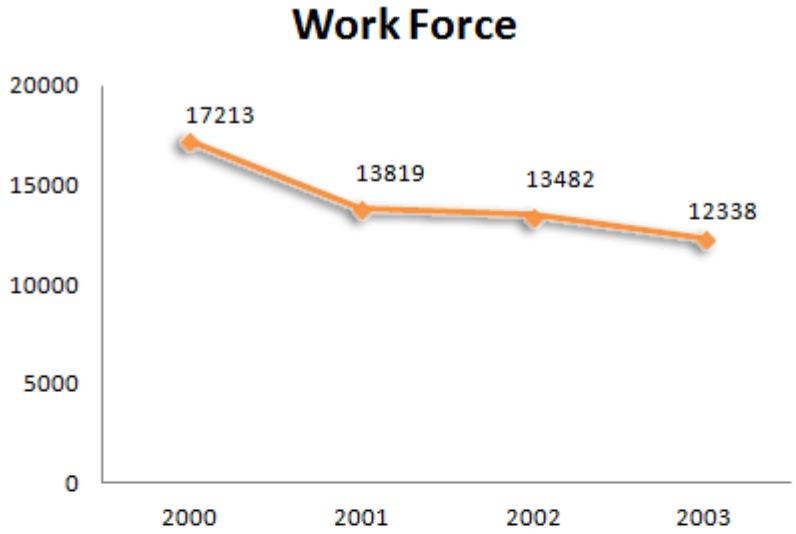
- (Number of students scoring 30 and above marks in aggregate)

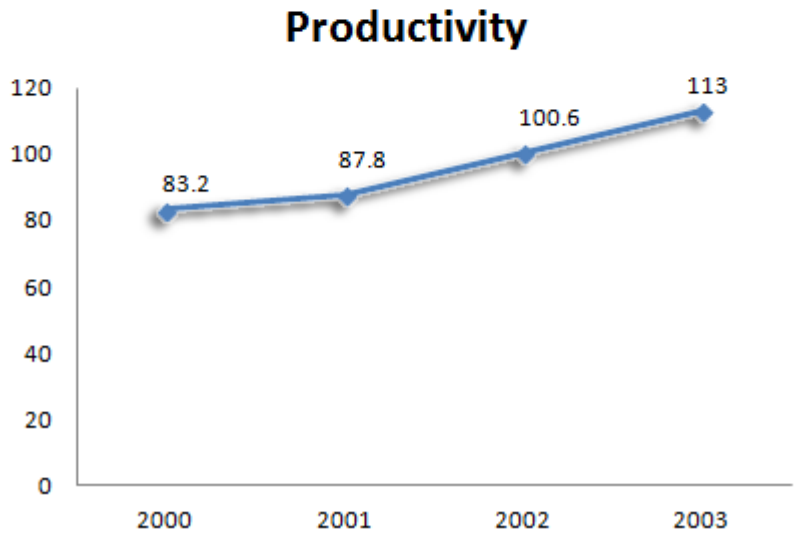
= 27 - 21

= 6.

Directions (18 -20): Answer the questions on the basis of following Line graph.

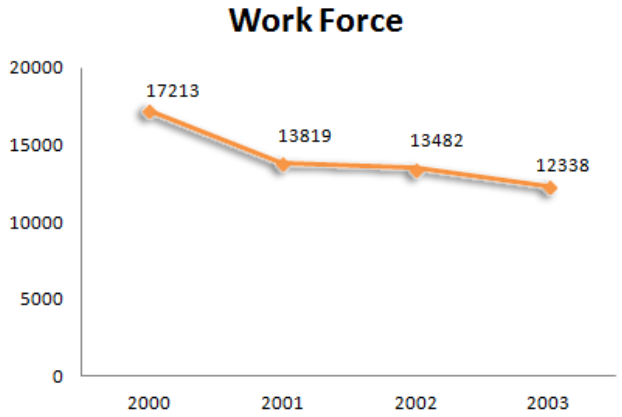
The change in Workforce and Productivity of Bajaj Auto For the Period 2000-2003

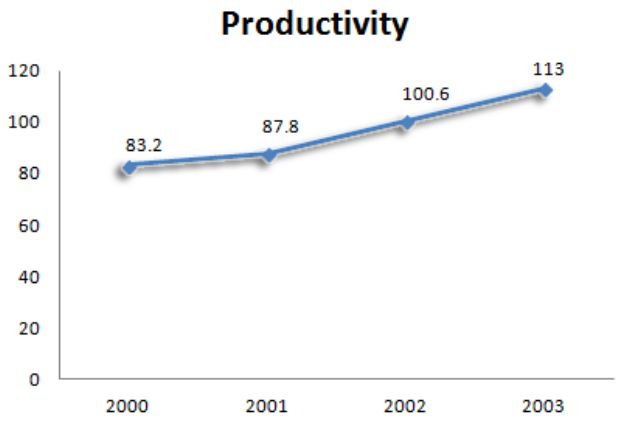




18. By how much percentage has production changed in 2003 as compared to its value for 2000?

A.-3%
B.+5%
C.0%
D.+7%





Answer: Option A

Solution:

Change in production

= 12338 - 17213

= - 4875

% change

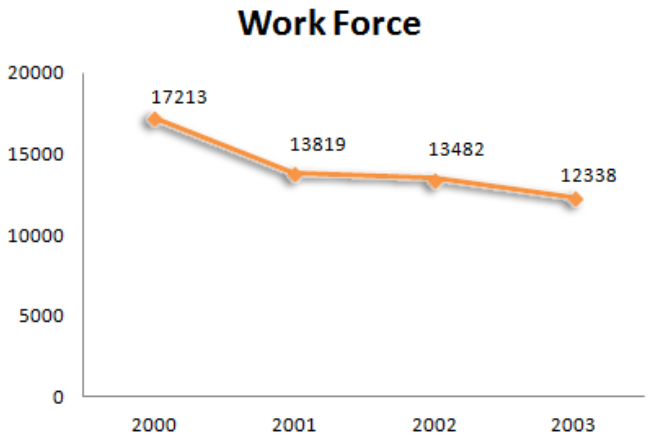
$$= \frac{-4875}{17213} \times 100$$

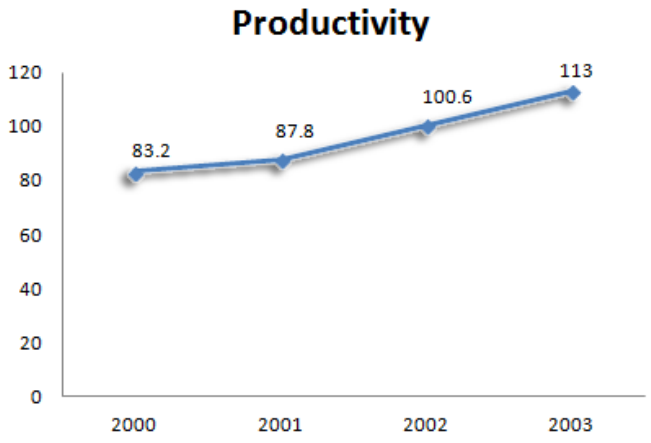
= -2.9%

≈ -3%

19. The percentage change in which of the mentioned areas is the highest over the period 2000-03?

A.Workforce
B.Productivity
C.Production
D.Workforce and Production both





Answer: **Option B**

Solution:

Change in productivity

= 113 - 83.2

= 29.8

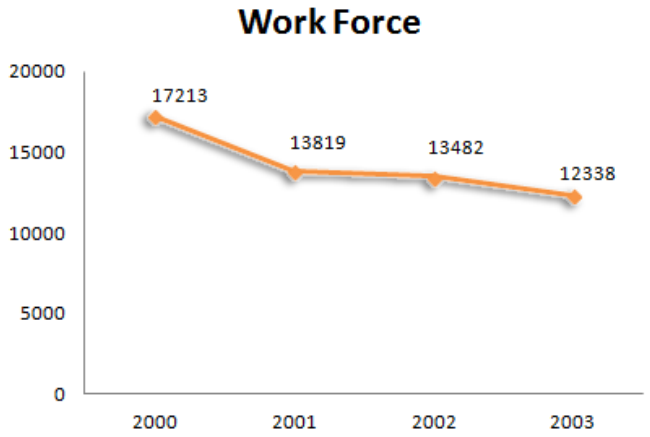
% change

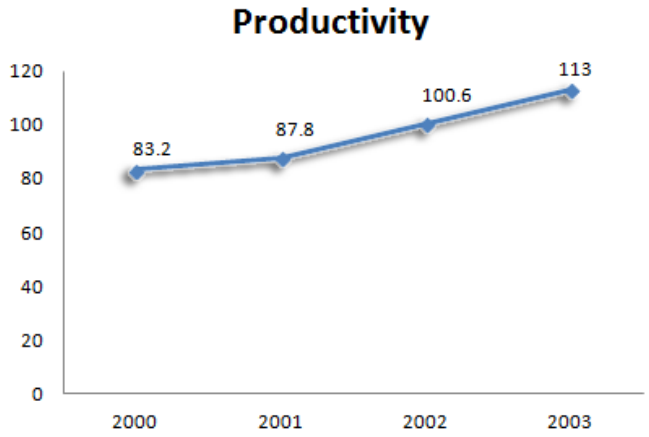
$$= \frac{29.8}{83.2} \times 100$$

= 35.8%

20. Which two variables have mentioned in the same direction in the mentioned period?

A.Workforce and Productivity
B.Workforce and Production
C.Production and Productivity
D.None of these



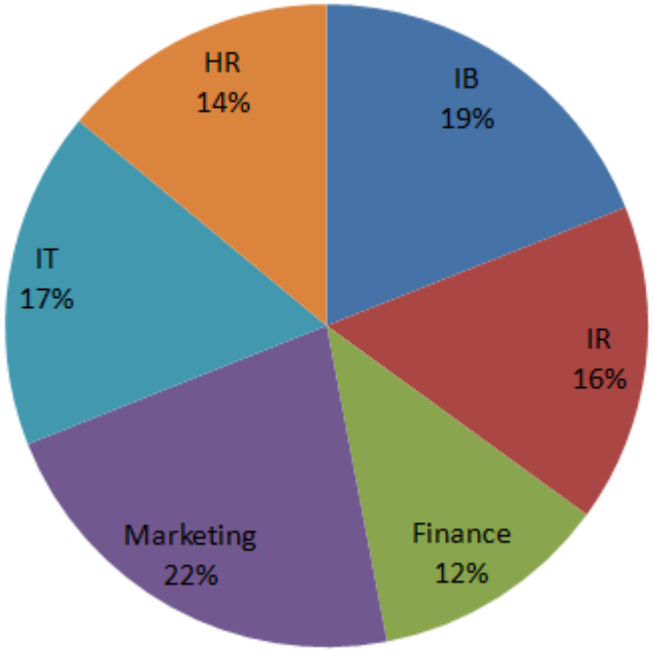


Answer: **Option B**

Solution:

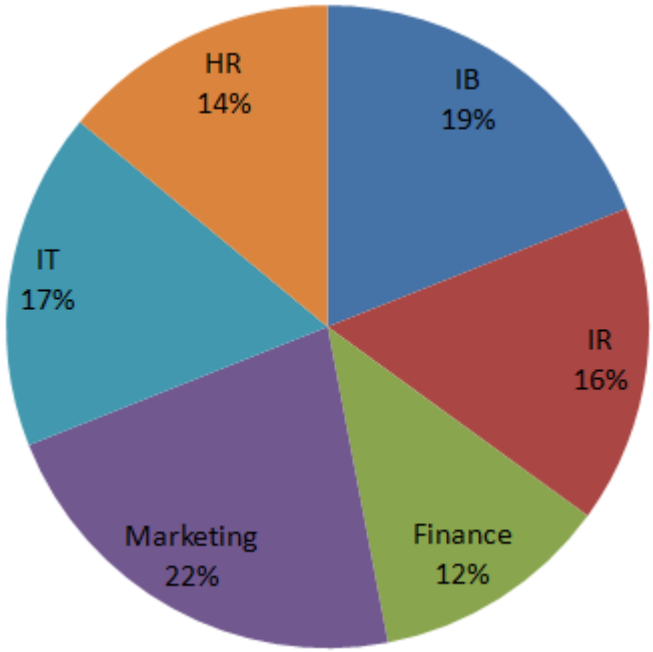
Both the Workforce and Production have dropped.

<u>Direction (21- 25):</u> Study the pie-chart given below carefully and answer the questions that follow.
Percentage-wise break up of students in terms of specialization in M.B.A.
Total Number of students = 8000.



21. Students having IB as specialisation forms approximately what percent of students having Marketing as specialisation?

A.116%
B.86%
C.124%
D.74%



Answer: Option B

Solution:

Number of students in various specialisations:

$$\text{IB} \rightarrow \frac{19}{100} \times 8000 = 1520$$

$$\text{IR} \rightarrow \frac{16}{100} \times 8000 = 1280$$

$$\text{Finance} \rightarrow \frac{12}{100} \times 8000 = 960$$

$$\text{Marketing} \rightarrow \frac{22}{100} \times 8000 = 1760$$

$$\text{IT} \rightarrow \frac{17}{100} \times 8000 = 1360$$

$$\text{HR} \rightarrow \frac{14}{100} \times 8000 = 1120$$

$$\text{Required percentage}$$

$$= \left(\frac{1520}{1760} \times 100\right)\%$$

$$= \frac{950}{11}\%$$

$$= 86.36\%$$

$$\approx 86\%$$

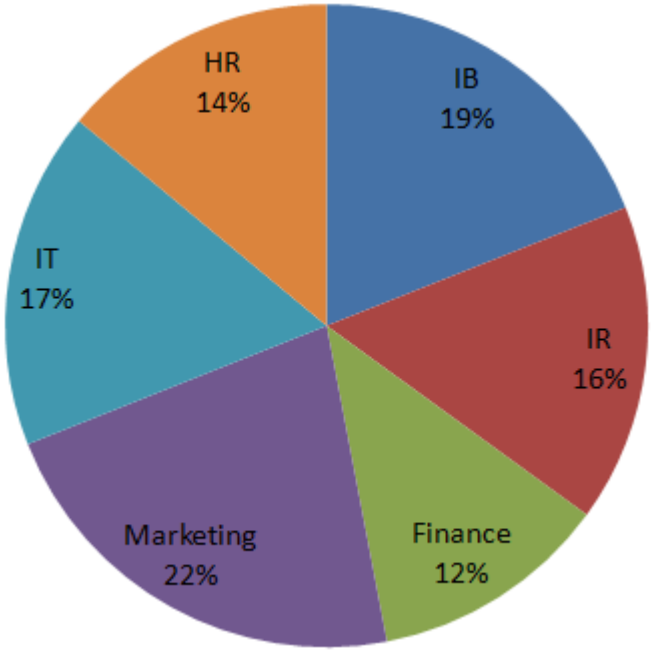
22. Students having IR as specialisation forms approximately what percent of students having HR as specialisation?

A.87%

B.106%

C.76%

D.114%



Answer: Option D.

Solution:

Number of students in various specialisations:

$$\text{IB} \rightarrow \frac{19}{100} \times 8000 = 1520$$

$$\text{IR} \rightarrow \frac{16}{100} \times 8000 = 1280$$

$$\text{Finance} \rightarrow \frac{12}{100} \times 8000 = 960$$

$$\text{Marketing} \rightarrow \frac{22}{100} \times 8000 = 1760$$

$$\text{IT} \rightarrow \frac{17}{100} \times 8000 = 1360$$

$$\text{HR} \rightarrow \frac{14}{100} \times 8000 = 1120$$

$$\text{Required percentage}$$

$$= \left(\frac{1280}{1120} \times 100\right)\%$$

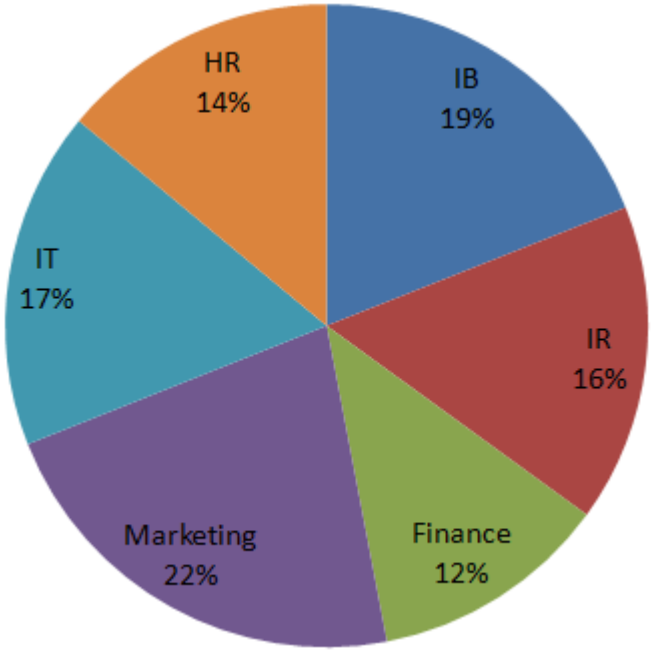
$$= \frac{800}{7}\%$$

$$= 114.28\%$$

$$\approx 114\%$$

23. What is the total number of students having IB as specialisation?

A.1520
B.1280
C.1360
D.1120



Answer: Option A

Solution:

Number of students in various specialisations:

$$\text{IB} \rightarrow \frac{19}{100} \times 8000 = 1520$$

$$\text{IR} \rightarrow \frac{16}{100} \times 8000 = 1280$$

$$\text{Finance} \rightarrow \frac{12}{100} \times 8000 = 960$$

$$\text{Marketing} \rightarrow \frac{22}{100} \times 8000 = 1760$$

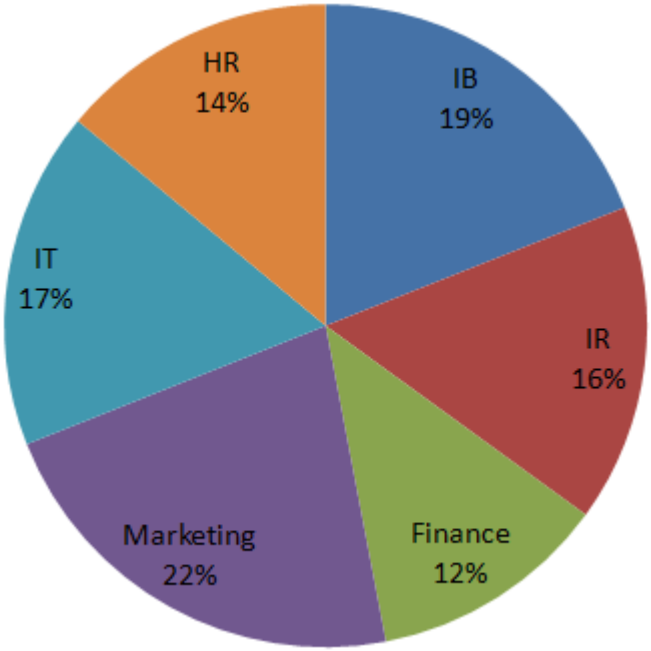
$$\text{IT} \rightarrow \frac{17}{100} \times 8000 = 1360$$

$$\text{HR} \rightarrow \frac{14}{100} \times 8000 = 1120$$

Number of those having IB as specialisation = 1520

24. What is the total number of students having specialisation in IR, marketing and IT?

A.4640
B.4080
C.4260
D.4400



Answer: Option D

Solution:

Number of students in various specialisations:

$$\text{IB} \rightarrow \frac{19}{100} \times 8000 = 1520$$

$$\text{IR} \rightarrow \frac{16}{100} \times 8000 = 1280$$

$$\text{Finance} \rightarrow \frac{12}{100} \times 8000 = 960$$

$$\text{Marketing} \rightarrow \frac{22}{100} \times 8000 = 1760$$

$$\text{IT} \rightarrow \frac{17}{100} \times 8000 = 1360$$

$$\text{HR} \rightarrow \frac{14}{100} \times 8000 = 1120$$

Required number of students

= 1280 + 1760 + 1360

= 4400

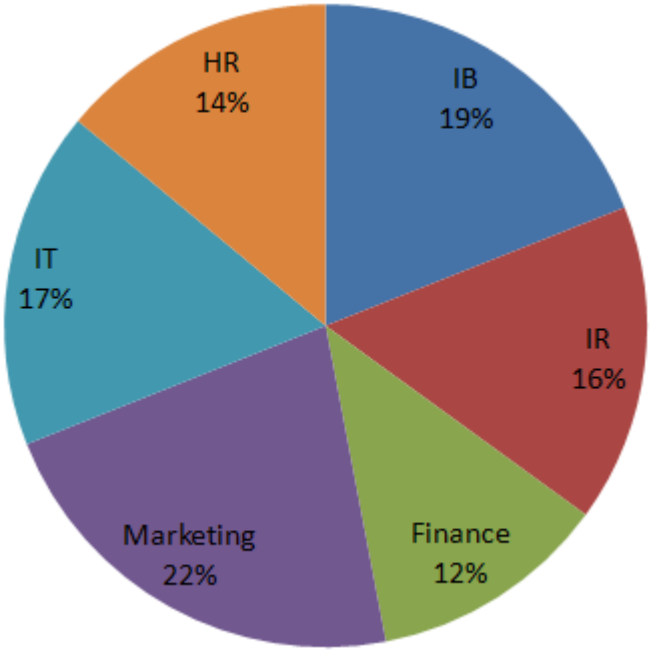
25. What is the ratio of the students having finance as specialisation to students having HR as specialisation?

A.11 : 19

B.18 : 13

C.6 : 7

D.4 : 7



Answer: Option C

Solution:

Number of students in various specialisations:

$$\text{IB} \rightarrow \frac{19}{100} \times 8000 = 1520$$

$$\text{IR} \rightarrow \frac{16}{100} \times 8000 = 1280$$

$$\text{Finance} \rightarrow \frac{12}{100} \times 8000 = 960$$

$$\text{Marketing} \rightarrow \frac{22}{100} \times 8000 = 1760$$

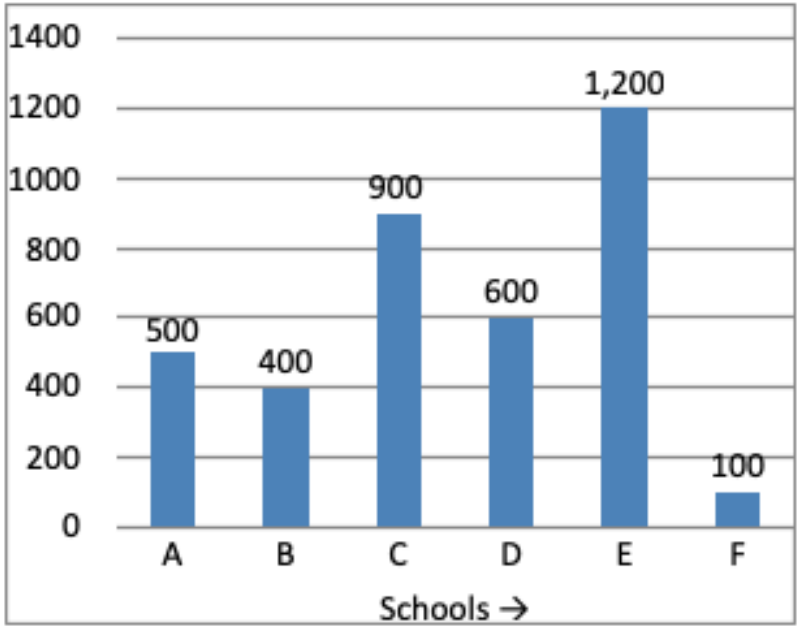
$$\text{IT} \rightarrow \frac{17}{100} \times 8000 = 1360$$

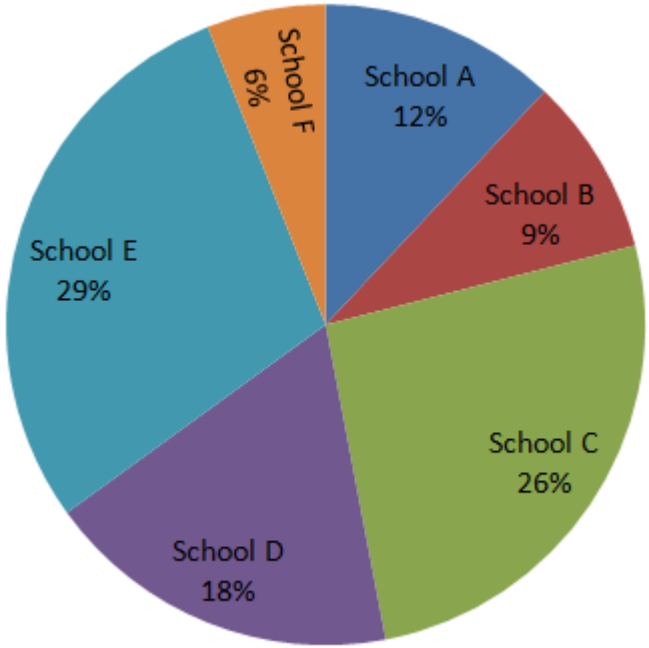
$$\text{HR} \rightarrow \frac{14}{100} \times 8000 = 1120$$

$$\text{Required ratio}$$
$$= \text{Finance} : \text{HR}$$
$$= \frac{960}{1120}$$
$$= \frac{6}{7}$$
$$= 6 : 7$$

Directions (26 - 30): study the following pie chart and bar diagram and answer the following questions.
Percentage-wise Distribution of students in 6 Different Schools.
Total number of students = 6000.

Number of Boys in Each School Out of 6000 Student





26.What is the ratio of the number of boys in school C, the number of girls in school B and the total number of students in school E?

A.45 : 7 : 97
B.43 : 9 : 97
C.45 : 7 : 87
D.43 : 9 : 87

Answer: Option C

Solution:

Number of students in:

$$A \rightarrow \frac{12}{100} \times 6000 = 720$$

$$B \rightarrow \frac{9}{100} \times 6000 = 540$$

$$C \rightarrow \frac{26}{100} \times 6000 = 1560$$

$$D \rightarrow \frac{18}{100} \times 6000 = 1080$$

$$E \rightarrow \frac{29}{100} \times 6000 = 1740$$

$$F \rightarrow \frac{6}{100} \times 6000 = 360$$

Number of boys in:

A → 500

B → 400

C → 900

D → 600

E → 1200

F → 100

Number of girls in:

A → 720 - 500 = 220

B → 540 - 400 = 140

C → 1560 - 900 = 660

D → 1080 - 600 = 480

E → 1740 - 1200 = 540

F → 360 - 100 = 260

Required ratio

= 900 : 140 : 1740

= 90 : 14 : 174

= 45 : 7 : 87

27. The number of girls school A is approximately what percentage of the total number of students in school B?

A.55%
B.50%
C.35%
D.40%

Answer: Option D.

Solution:

Number of students in:

$$A \rightarrow \frac{12}{100} \times 6000 = 720$$

$$B \rightarrow \frac{9}{100} \times 6000 = 540$$

$$C \rightarrow \frac{26}{100} \times 6000 = 1560$$

$$D \rightarrow \frac{18}{100} \times 6000 = 1080$$

$$E \rightarrow \frac{29}{100} \times 6000 = 1740$$

$$F \rightarrow \frac{6}{100} \times 6000 = 360$$

Number of boys in:

A → 500

B → 400

C → 900

D → 600

E → 1200

F → 100

Number of girls in:

A → 720 - 500 = 220

B → 540 - 400 = 140

C → 1560 - 900 = 660

D → 1080 - 600 = 480

E → 1740 - 1200 = 540

F → 360 - 100 = 260

Let (number of girls in A) be $x\%$ of number of students in B.

Then,

$$200 = \frac{x}{100} \times 540$$

$$\Rightarrow x = \frac{220 \times 100}{540}$$

$$\Rightarrow x = \frac{1100}{27}$$

$$\Rightarrow x = 40.7$$

$$\Rightarrow x \approx 40\%$$

28. What is the sum of the number of girls in school C, the number of girls in school E and the number of boys in school D together?

A.1700
B.1900
C.1600
D.1800

Answer: Option D

Solution:

Number of students in:

$$A \rightarrow \frac{12}{100} \times 6000 = 720$$

$$B \rightarrow \frac{9}{100} \times 6000 = 540$$

$$C \rightarrow \frac{26}{100} \times 6000 = 1560$$

$$D \rightarrow \frac{18}{100} \times 6000 = 1080$$

$$E \rightarrow \frac{29}{100} \times 6000 = 1740$$

$$F \rightarrow \frac{6}{100} \times 6000 = 360$$

Number of boys in:

A → 500

B → 400

C → 900

D → 600

E → 1200

F → 100

Number of girls in:

A → 720 - 500 = 220

B → 540 - 400 = 140

C → 1560 - 900 = 660

D → 1080 - 600 = 480

E → 1740 - 1200 = 540

F → 360 - 100 = 260

Required sum

= 660 + 540 + 600

= 1800

29. What is the difference between the total number of students in school F and the number of boys in school E?

A.820
B.860
C.880
D.None of these

Answer: Option D

Solution:

Number of students in:

$$A \rightarrow \frac{12}{100} \times 6000 = 720$$

$$B \rightarrow \frac{9}{100} \times 6000 = 540$$

$$C \rightarrow \frac{26}{100} \times 6000 = 1560$$

$$D \rightarrow \frac{18}{100} \times 6000 = 1080$$

$$E \rightarrow \frac{29}{100} \times 6000 = 1740$$

$$F \rightarrow \frac{6}{100} \times 6000 = 360$$

Number of boys in:

A → 500

B → 400

C → 900

D → 600

E → 1200

F → 100

Number of girls in:

A → 720 - 500 = 220

B → 540 - 400 = 140

C → 1560 - 900 = 660

D → 1080 - 600 = 480

E → 1740 - 1200 = 540

F → 360 - 100 = 260

(Number of boys in E) - (Number of students in F)

= 1200 - 100

= 1100

30. In which of the following schools is the total number of students equal to the number of girls in school E?

A.A
B.B
C.C
D.D

Temple of Learning
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Answer: Option B

Solution:

Number of students in:

$$A \rightarrow \frac{12}{100} \times 6000 = 720$$

$$B \rightarrow \frac{9}{100} \times 6000 = 540$$

$$C \rightarrow \frac{26}{100} \times 6000 = 1560$$

$$D \rightarrow \frac{18}{100} \times 6000 = 1080$$

$$E \rightarrow \frac{29}{100} \times 6000 = 1740$$

$$F \rightarrow \frac{6}{100} \times 6000 = 360$$

Number of boys in:

A → 500

B → 400

C → 900

D → 600

E → 1200

F → 100

Number of girls in:

A → 720 - 500 = 220

B → 540 - 400 = 140

C → 1560 - 900 = 660

D → 1080 - 600 = 480

E → 1740 - 1200 = 540

F → 360 - 100 = 260

Number of girls in School E = 540

= Total number of students in B