MATHS
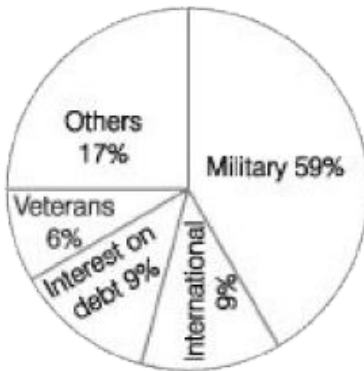
BOOKS - ARIHANT SSC MATHS (HINGLISH)

PIE CHART

Example

1. In year 2012,if India hada total expenditure of 120billion, then howmany billions did it

spend on interest on debt?

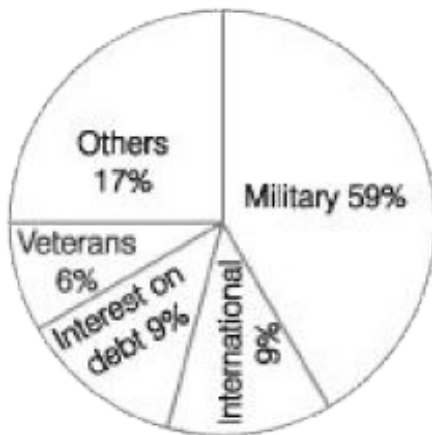National budget expenditure in the year 2012
(Percentage distribution)

Others 17%

Military 59%

Veterans 6%

Interest on debt 9%

International 9%

▶ **Watch Video Solution**

2. If 9 billion were spent in year 2012 for

veterans, then what would have been the total

expenditure for that year (in billions)?

National budget expenditure in the year 2012
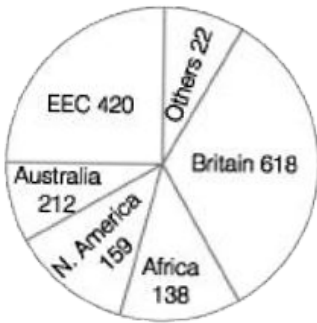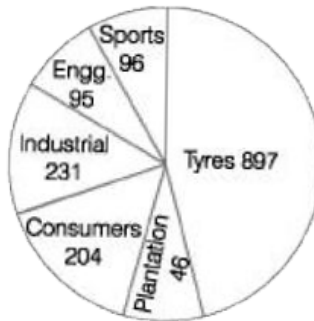(Percentage distribution)

Watch Video Solution

3. If in the next year, the sales of sports goods were expected to double assuming that the total sales do not change, what would be the

percentage share of sports goods in the total sales?

Sales by location of company
(In million pounds)

Sales by product
(In million pounds)
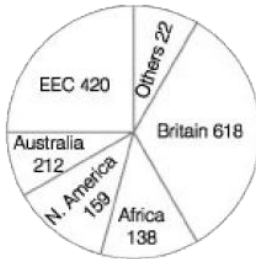

Total sales = 1569 million pounds
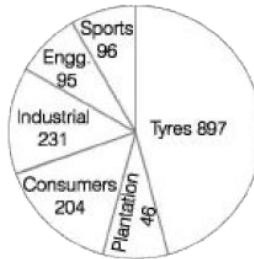
▶ **Watch Video Solution**

4. If 20% of the tyre sales were in the EEC countries, then what was the value of sales of other products in the EEC countries in million

of pounds?

Sales by location of company
(In million pounds)

EEC 420

Others 22

Britain 618

Australia 212

N. America 159

Africa 138

Sales by product
(In million pounds)

Sports 96

Engg 95

Industrial 231

Tyres 897

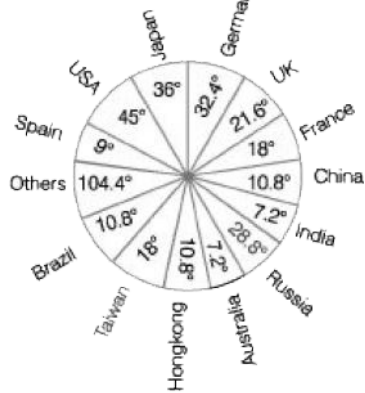Consumers 204

Plantation 46

Total sales = 1569 million pounds

▶ **Watch Video Solution**

5. By how much does the value of the exports of USA exceed that of Germany?

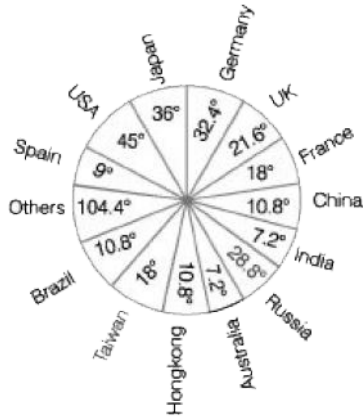Countrywise global exports presentation

Total = 72000 billion

Watch Video Solution

6. The difference in the values of the exports of Japan and France is how many times that of UK and Taiwan? Sol. The difference in the

angles of the export of Japan and Prance

Countrywise global exports presentation

Total = 72000 billion

Spain
USA
Japan
Germany
UK
France 18°
China 10.8°
India 7.2°
Russia 28.6°
Australia 10.8°
Hongkong 18°
Taiwan
Brazil
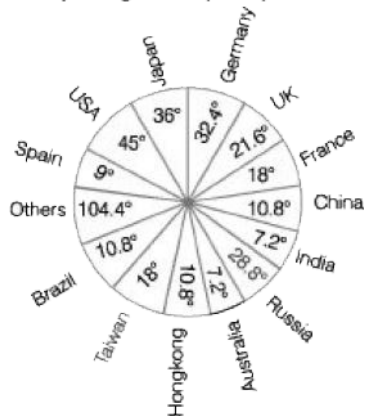Others 104.4°
45° 36° 32.4° 21.6°
9°
10.8°
7.2°

> **Watch Video Solution**

7. The value of the exports of the OPEC countries is how much more than the value of the exports of India and Australia put together,given that OPEC has a 20% share in

the value of the exports of others?

Countrywise global exports presentation
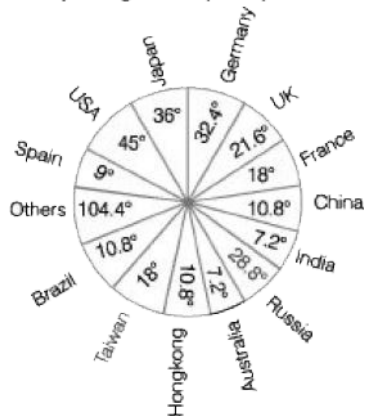
Total = 72000 billion

Watch Video Solution

---

8. If exports of developing countries accounted for 36% of the total worldwide exports,then what is the value of the exports of Japan as a percentage of the exports of the

developing coun- tries?

Countrywise global exports presentation

Total = 72000 billion

Labels around the pie chart (clockwise from top): Germany, UK 32.4°, France 21.6°, 18°, China 10.8°, India 7.2°, Russia 28.6°, Australia 7.2°, Hongkong 10.8°, Taiwan 18°, Brazil 10.8°, Others 104.4°, Spain 9°, USA 45°, Japan 36°
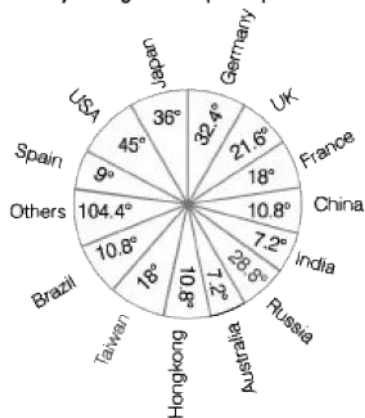
▶ **Watch Video Solution**

9. Considering 'others' as a single country, what is the number of countries whose exports are more than the average exports per

country?

Countrywise global exports presentation
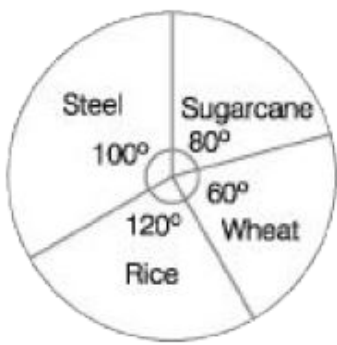

Total = 72000 billion

▶ **Watch Video Solution**

Exercise Base Level Questions

---

1. The yield of rice is how much per cent more than that of sugarcane?

A. 0.4

B. 0.5

C. 0.6

D. 0.75

Answer:

▶ Watch Video Solution

2. If the yield of rice and wheat is 9000 tonnes, then the yield of excess product of others in composition with sugarcane is

Steel 100° Sugarcane 80° 60° Wheat 120° Rice
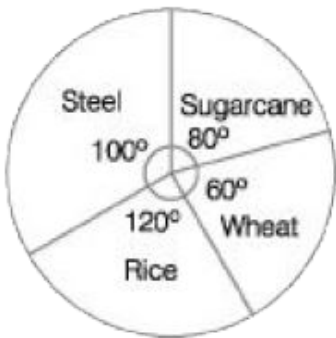
A. 1000 tonnes

B.) 2000 tonnes

C. 3000 tonnes

D. 4000 tonnes

Answer: A

3. The following pie chart shows the performance in an examination in a particular year for 360 students. The number of students who passed in 1st division is
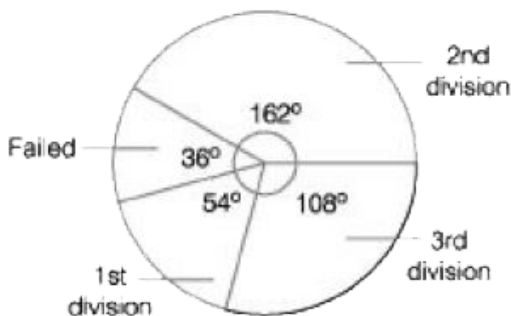
A. 45

B. 54

C. 64

D. 74

Answer: D

▶ **Watch Video Solution**

4. The following pie chart shows the performance in an examination in a particular year for 360 students. The number of students

who passed in 2nd division is more than those

in 1st division by

A. 111

B. 112

C. 109

D. 108

Answer: A::B

5. The ratio of successful students to the failed students is
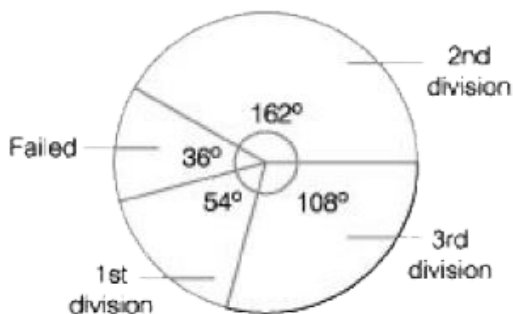
A. $9 : 1$

B. $5 : 1$

C. $1 : 9$

D. $2:1$

Answer: A

▶ **Watch Video Solution**

6. The following pie chart shows the performance in an examination in a particular year for 360 students. The percentage of

students who have failed in the examination is

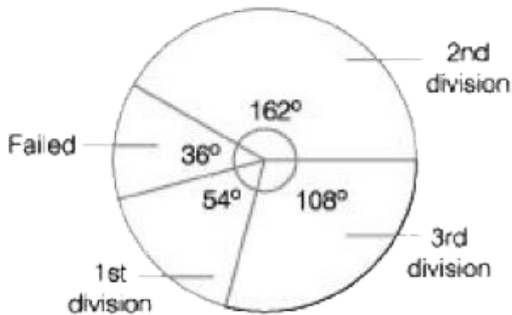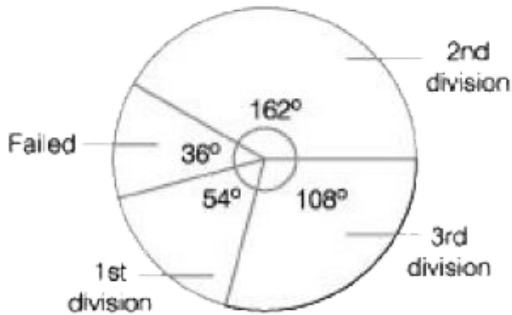A. 0.2

B. 0.36

C. 0.1

D. 0.3

Answer: A

▶ **Watch Video Solution**

7. The following pie chart shows the performance in an examination in a particular year for 360 students.The total number of students who have passed in 2nd and 3rd division is
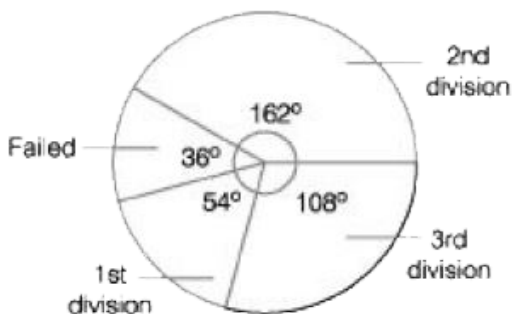
A. 162

B. 270

C. 108

D. None of these

Answer: B

▶ **Watch Video Solution**

8. the following examination shows the analysis of the result of an examination in which 5 candidates have failed. The total

number of examinees was

210°

15°

135°

Failed candidates

Passed male candidates

Passed female candidates

A. 100

B. 120

C. 135

D. 150

Answer: A::B

9.

The following examination shows the analysis of the result of an examination in which 5 candidates have failed.The number of passed male examinees is

Failed candidates

Passed male candidates

Passed female candidates

A. 80

B. 75

C. 70

D. 60

Answer:

10. The following examination shows the analysis of the result of an examination in which 5 candidates have failed.Percentage of passed female candidates with respect to total examinees is
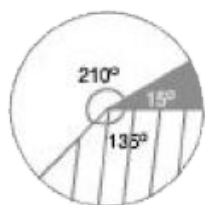
Failed candidates

Passed male candidates

Passed female candidates

A. 0.3

B. 0.375

C. 0.4

D. 0.45

Answer: C

▶ Watch Video Solution

11. The following examination shows the analysis of the result of an examination in which 5 candidates have failed . Percentage of

passed male candidates of total passed

candidates is

210°
15°
135°

Failed candidates

Passed male candidates

Passed female candidates
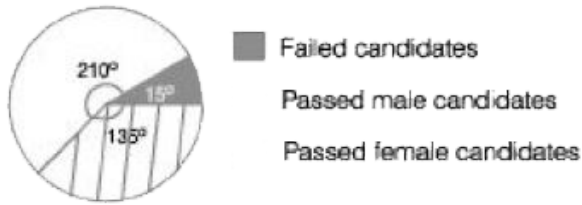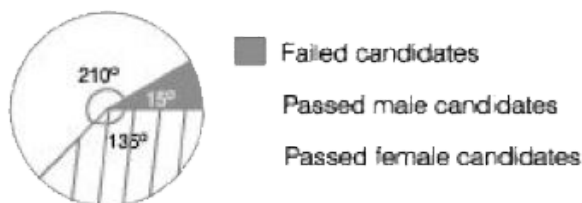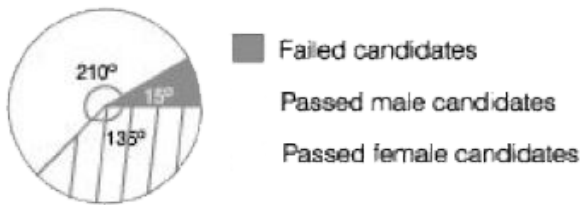
A. 0.608

B. 0.56

C. 0.71

D. 0.58

Answer: A

▶ Watch Video Solution

12. The following examination shows the analysis of the result of an examination in which 5 candidates have failed. Ratio of passed male candidates to the successful female candidates is

	Failed candidates
210°	
15°	Passed male candidates
135°	Passed female candidates
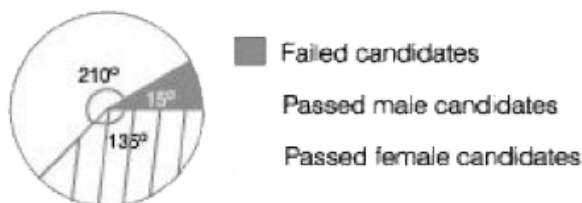
A. 9 : 1

B. 1 : 14

C. $14 : 9$

D. $9 : 14$

Answer: A::D

▶ **Watch Video Solution**

---

13. If the cost of paper is rs 150000, then the expense on advertisement is

A pie chart showing:
- Cost of printing 20%
- Cost of paper 30%
- Advertisement 7%
- Miscellaneous expenses 20%
- Binding 15%
- Royalty 8%
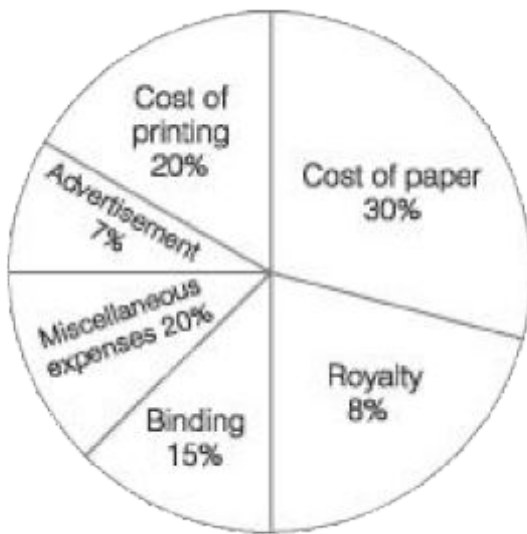
A. X 35000

B. X 3500

C. ? 40000

D. ? 25000

Answer: C

14. The central angle corresponding tothecost

ofprinting is
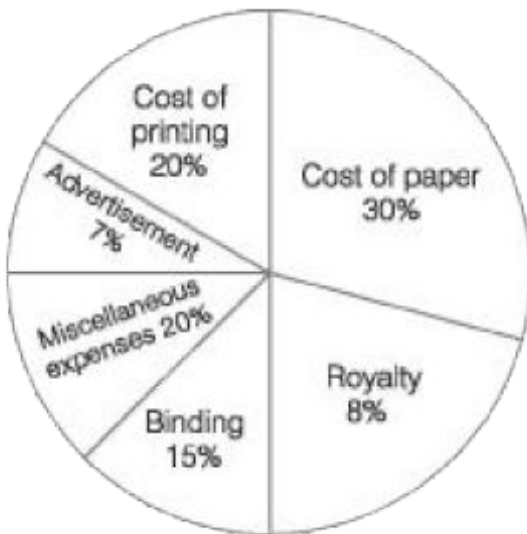
A. $60°$

B. $72°$

C. $45°$

D. none of the above

Answer: B

▶ **Watch Video Solution**

15. The following pie chart represents a total expenditure of 540000 on different items in constructing a flat in a town. The expenditure

(in ?) on bricks is
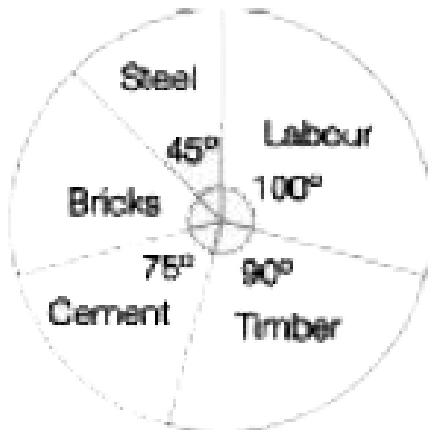
A. 75000

B. 67500

C. 150000

D. 70000

Answer:

16. The following pie chart represents a total expenditure of 540000 on different items in constructing a flat in a town. The expenditure on bricks is less than the expenditure on

timber (in ?)
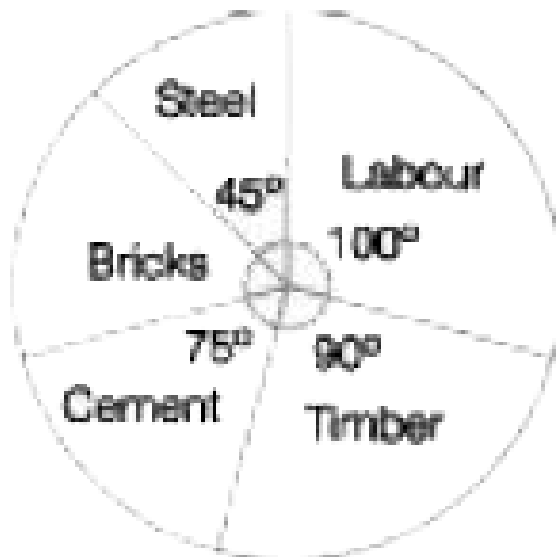
A. 10000

B. 12500

C. 60000

D. 65000

Answer:

17. The following pie chart represents a total expenditure of 540000 on different items in constructing a flat in a town. The percentage of the total expenditure spent on steel and

cement is
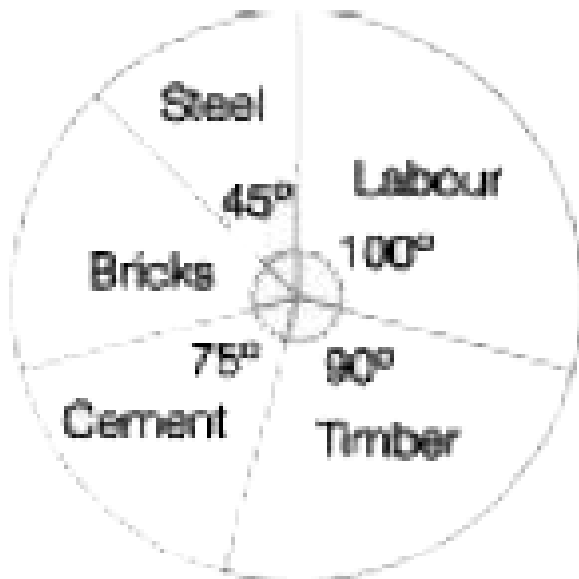
A. 0.3323

B. 0.25

C. $33\dfrac{1}{3}\,\%$

D. 30%

Answer: A::C

18. The following pie chart represents a total expenditure of 540000 on different items in constructing a flat in a town. Which is the item

of maximum expenditure?
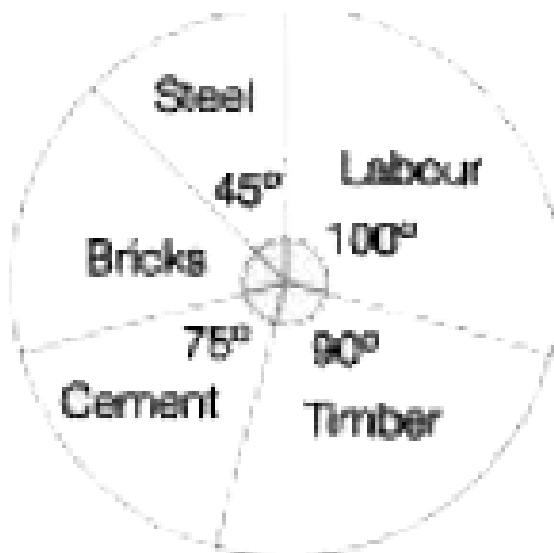
A. Cement

B. Steel

C. Timber

D. Labour

Answer:

19. The following pie chart represents a total expenditure of 540000 on different items in constructing a flat in a town. The expenditure

(inT)on cement is

Steel

45° Labour

Bricks 100°

75° 90°

Cement Timber
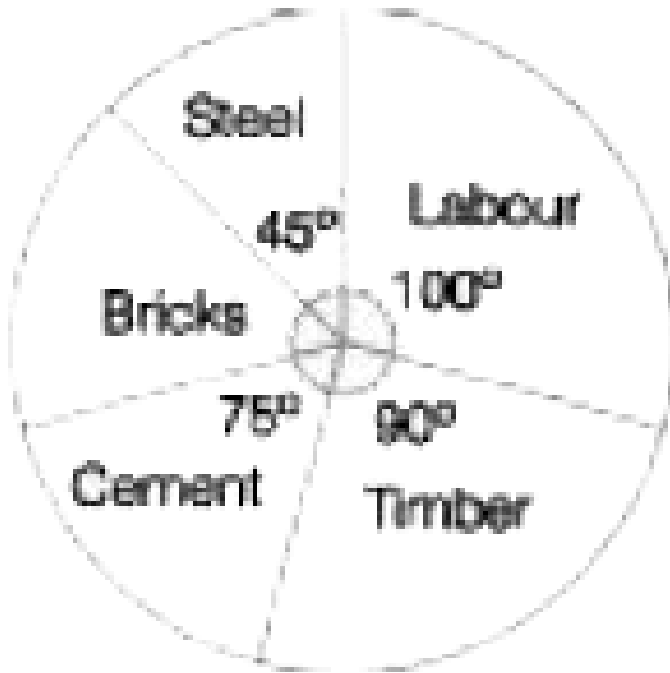
A. 75000

B. 90000

C. 135000

D. 112500

Answer: A::B

20. If two-ninth of the teachers who teach Physics, are female, then number of male Physics teachers is approximately what per cent of the total number of teachers who

teach Chemistry?

Percentagewise distribution of teachers
who teach six different subjects
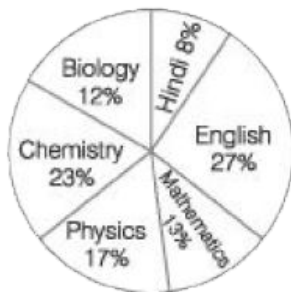
Total number of teachers = 1800

A. 0.57

B. 0.42

C. 0.63

D. 0.69

Answer: B::C

21. What is the total number of teachers teaching Chemistry, English and Biology ?

Percentagewise distribution of teachers
who teach six different subjects

Biology 12%
Hindi 8%
English 27%
Chemistry 23%
Mathematics 13%
Physics 17%
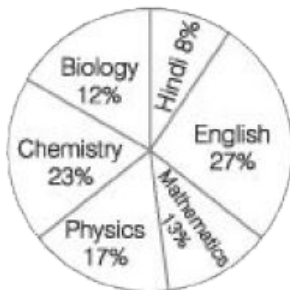
Total number of teachers = 1800

A. 1226

B. 1116

C. 1176

D. 998

Answer: A

▶ **Watch Video Solution**

22. What is the difference between the total number of teachers who teach English and Physics together and the total number of teachers who teach Mathematics and Biology

together?

Percentagewise distribution of teachers
who teach six different subjects
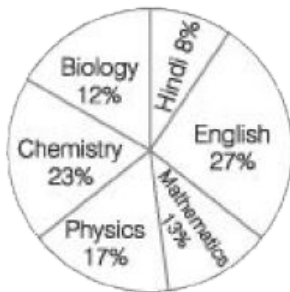
Total number of teachers = 1800

A. 352

B. 342

C. 643

D. 653

Answer: B::C::D

23. What is the respective ratio of the number of teachers who teach Mathematics and the number of teach- ers who teach Hindi? ?

Percentagewise distribution of teachers
who teach six different subjects

Biology 12%
Hindi 8%
English 27%
Chemistry 23%
Mathematics 13%
Physics 17%
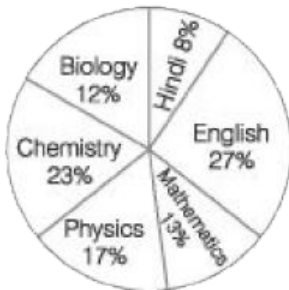
Total number of teachers = 1800

A. $13:8$

B. $7:13$

C. $9 : 26$

D. $8 : 15$

Answer: A::C

▶ **Watch Video Solution**

---

24. If the percentage of Mathematics teachers

isincreased by50%andpercentage

ofHinditeachers isde- creased by 25%, then

what will be the total number of Mathematics

and Hindi teachers together?

Percentagewise distribution of teachers
who teach six different subjects

Biology
12%

Hindi 8%

English
27%

Chemistry
23%

Mathematics
13%

Physics
17%
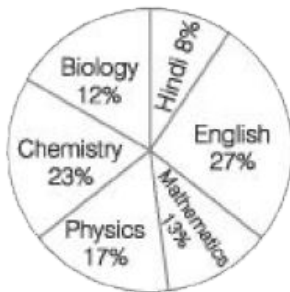
Total number of teachers = 1800

A. 390

B. 379

C. 459

D. 480

Answer: D

25. What is total sum of expenditures on research work, purchase of overhead projectors for Ph.D classes and purchase of books for library together?

Expenditure on different sectors by university for various purposes

Purchase of overhead projectors for Ph.D classes 24%

Medical facility for students 7%

Research work 8%

Psychology laboratory 10%

Publication of journals 15%

Computer laboratory 18%

Purchase books for library 6%

Sports 12%

Total expenditure = ₹ 60 lakh

A. X 22.6 lakh

B. X 22.8 lakh

C. X 23.4 lakh

D. X 20.8 lakh

Answer: A::B

▶ **Watch Video Solution**

26. What is the difference between the
expenditures made by university on
publication of journals and psy- chology

laboratory?

Expenditure on different sectors by
university for various purposes

Total expenditure = ₹ 60 lakh

A. X 4 lakh

B. X 3 lakh

C. X 4.2 lakh

D. X 3.8 lakh

Answer: A::C

> ▶ **Watch Video Solution**

27. What is the respective ratio between the

expenditures made by university on research

work and pur- chase of books for library?

Expenditure on different sectors by university for various purposes

Purchase of overhead projectors for Ph.D classes 24%

Medical facility for students 7%

Research work 8%

Psychology laboratory 10%

Computer laboratory 18%

Publication of journals 15%

Purchase books for library 6%

Sports 12%

Total expenditure = ₹ 60 lakh

A. 4 : 3

B. 5 : 4

C. 8 : 3

D. 8 : 5

Answer: C::D

28. If the expenditure on purchaseo fover head

projectors for Ph.Dstudents is decreased by

7%,then what will be the expenditure on the

same after the decrease?

Expenditure on different sectors by
university for various purposes

Purchase of overhead projectors for Ph.D classes 24%

Medical facility for students 7%

Research work 8%

Psychology laboratory 10%

Computer laboratory 18%

Publication of journals 15%

Purchase books for library 6%

Sports 12%

Total expenditure = ₹ 60 lakh

A. X 133920

B. X 1339200

C. X 1020000

D. X 108000

Answer: A::B

29. Which of the following is definitely true?

Expenditure on different sectors by university for various purposes

Purchase of overhead projectors for Ph.D classes 24%

Medical facility for students 7%

Research work 8%

Psychology laboratory 10%

Computer laboratory 18%

Publication of journals 15%

Purchase books for library 6%

Sports 12%

Total expenditure = ₹ 60 lakh

A. Ratio between expenditure of university on purchase of library books and expenditure on computer labor- atory is 3 : 1 respectively

B. Expenditure on medical facilities for students is X 4.6 lakh

C. Difference between the expenditure on research and medical facilities for students is X 60000

D. All are true

Answer:

30. The adjoining pie chart represents the proposed outlay of the fifth year plan of 40000 crore .The amount proposed on agriculture is more than that on industries

and minerals by

Agriculture

Irrigation and power

Industries and minerals

Education

Roads and communications
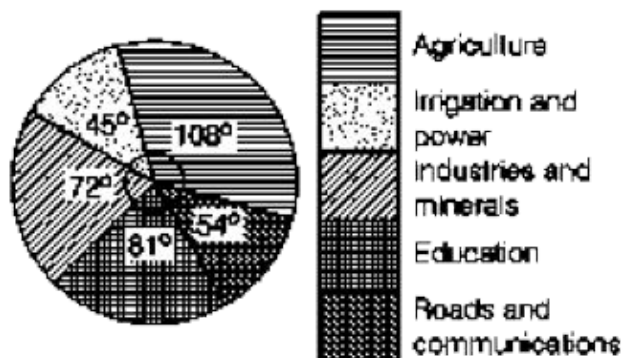
A. 0.075

B. 0.1

C. 0.12

D. 0.125

Answer: A

31. The adjoining pie chart represents the proposed outlay of the fifth year plan of 40000 crore . The amount (in X crore) proposed on irrigation and power is less than that on industries and minerals by

Agriculture

Irrigation and power

Industries and minerals

Education

Roads and communications
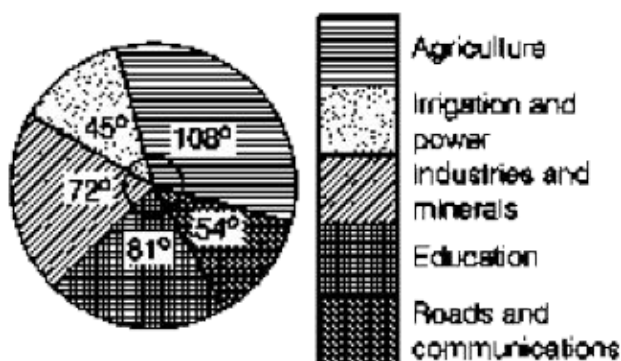
A. 3000

B. 3500

C. 2000

D. 2500

Answer: C

▶ **Watch Video Solution**

Exercise Higher Skill Level Questions

1. What is the respective ratio of the men to the women working in night shifts from the call center in- dustry?

Percentage of people in a city working in
night shifts from various industries
(Total number of people = 40250)

Chemical industries 16%

IT 12%

Banking 14%

Gaming 18%

Sales 8%

Call center 32%

Percentage of females from various industries working in night shifts

Industries	Females
IT	20%
Gaming	20%
Call center	45%
Sales	60%
Banking	40%
Chemical industries	15%

A. 11 : 9

B. $7:5$

C. $8:13$

D. $11:7$

Answer: A

▶ **Watch Video Solution**

2. What is the approximate average number of females working in night shifts from all the

industries to- gether?

Percentage of people in a city working in
night shifts from various industries
(Total number of people = 40250)

Chemical
industries
16%

IT 12%

Banking
14%

Gaming
18%

Call center
32%

Sales
8%

Percentage of females from various
industries working in night shifts

Industries	Females
IT	20%
Gaming	20%
Call center	45%
Sales	60%
Banking	40%
Chemical industries	15%

A. 2227

B. 4481

C. 3326

D. 2823

Answer: B

 Watch Video Solution

---

3. What is the total number of men working in night shifts from all the industries together?

Percentage of people in a city working in night shifts from various industries
(Total number of people = 40250)

Chemical industries 16%

IT 12%

Banking 14%

Gaming 18%

Sales 8%

Call center 32%

Percentage of females from various industries working in night shifts

Industries	Females
IT	20%
Gaming	20%
Call center	45%
Sales	60%
Banking	40%
Chemical industries	15%

A. 28297

B. 25788

C. 28678

D. 26887

Answer: B

4. The number of women working in night shifts from the gaming industry is what per cent of the total number of people working in the night shifts from all the industries

together?

Percentage of people in a city working in
night shifts from various industries
(Total number of people = 40250)

Chemical industries 16%

IT 12%

Banking 14%

Gaming 18%

Call center 32%

Sales 8%

Percentage of females from various
industries working in night shifts

Industries	Females
IT	20%
Gaming	20%
Call center	45%
Sales	60%
Banking	40%
Chemical industries	15%

A. 0.056

B. 0.036

C. 0.032

D. 0.044

Answer: C

5. What is the difference between the total number of men and the total number of women workingin night shifts from all the

industries together?

Percentage of people in a city working in night shifts from various industries
(Total number of people = 40250)

Chemical industries 16%

IT 12%

Banking 14%

Gaming 18%

Call center 32%

Sales 8%

Percentage of females from various industries working in night shifts

Industries	Females
IT	20%
Gaming	20%
Call center	45%
Sales	60%
Banking	40%
Chemical industries	15%

A. 13254

B. 13542

C. 13524
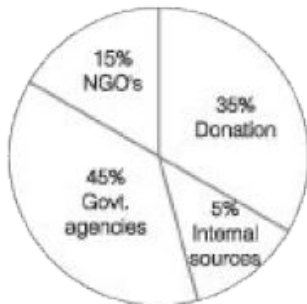
D. 13363

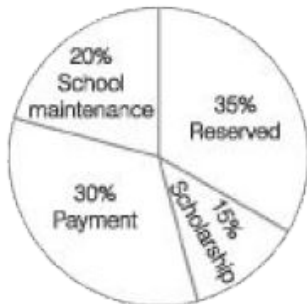**Answer: A::B::C::D**

▶ **Watch Video Solution**

6. What is the difference between the funds

acquired by school from NGO's and internal

sources?

The entire fund that school gets from different sources is equal to ₹ 500 lakh

15%
NGO's

35%
Donation

45%
Govt.
agencies

5%
Internal
sources

Sources of funds in school

20%
School
maintenance

35%
Reserved

30%
Payment

15%
scholarship

Uses of funds by school

A. X 50 lakh

B. X45 lakh

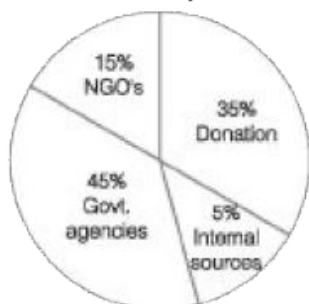C. ? 75 lakh

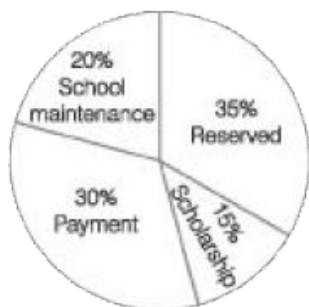D. ? 25 lakh

Answer: A

> ▶ **Watch Video Solution**

7. If the school managed school maintenance from the government agencies fund only, how much fund from government agencies would

still left for other use?

The entire fund that school gets from
different sources is equal to ₹ 500 lakh

15%
NGO's

35%
Donation

45%
Govt.
agencies

5%
Internal
sources

Sources of funds in school

20%
School
maintenance

35%
Reserved

30%
Payment

15%
Scholarship

Uses of funds by school

A. ? 125 lakh

B. X 150 lakh

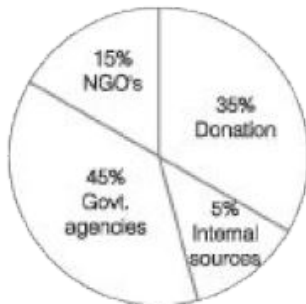C. X110 lakh

D. ? 95 lakh
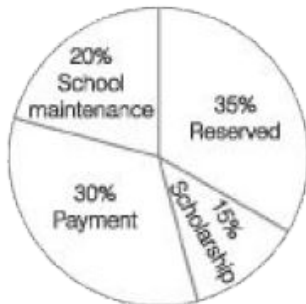
Answer: A::B

> ▶ **Watch Video Solution**

8. If scholarship has to be paid out of the donation fund,then what is the approximate percent of donation fund used for this

purpose?

The entire fund that school gets from
different sources is equal to ₹ 500 lakh

Sources of funds in school

Uses of funds by school
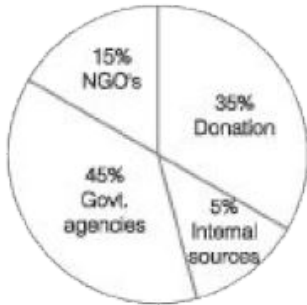
A. 0.43

B. 0.53

C. 0.37

D. 0.45

Answer: A::C::D

> ▶ **Watch Video Solution**

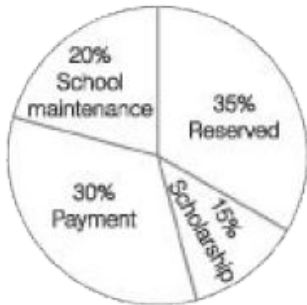**9.** What is the total amount used by the school for payment?

The entire fund that school gets from
different sources is equal to ₹ 500 lakh

15%
NGO's

35%
Donation

45%
Govt.
agencies

5%
Internal
sources

Sources of funds in school

20%
School
maintenance

35%
Reserved

30%
Payment

15%
Scholarship

Uses of funds by school

A. ? 100 lakh

B. 7 110 lakh

C. 7 150 lakh

D. 7 140 lakh

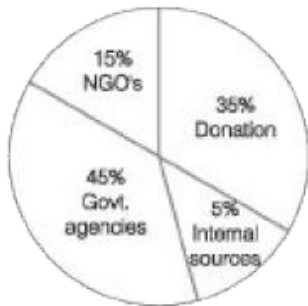**Answer: A**

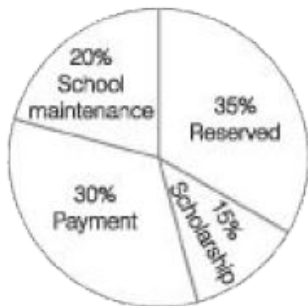**10.** What amount of the fund is acquired by the school from government agencies?

The entire fund that school gets from different sources is equal to ₹ 500 lakh

15% NGO's

35% Donation

45% Govt. agencies

5% Internal sources

Sources of funds in school

20% School maintenance

35% Reserved

30% Payment

15% Scholarship

Uses of funds by school

A. ? 220 lakh

B. 7 310 lakh

C. 7 255 lakh

D. 7 225 lakh

Answer: A::B

11. The number of employees who got promoted from the HR department was what percent of the total num- ber of employees working in that department? (Rounded off to two digits after decimal.

Break-up of employees working in different departments

Total number of employees = 3600

Accounts 20%
Marketing 18%
Production 35%
HR 12%
IT 15%

Break-up of number of males working in each department

Total number of males in the organisation = 2040

Accounts 5%
Marketing 15%
Production 50%
HR 10%
IT 20%

Break-up of number of employees who recently got promoted in each department

Accounts 8%

Production 33%

Marketing 22%

HR 11%

IT 26%
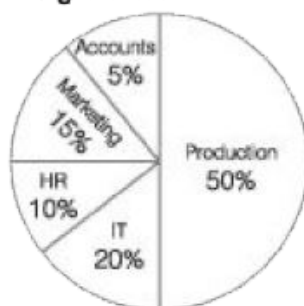
Total number of employees who got promoted = 1200

A. 0.3618

B. 0.3056

C. 0.4722

D. 0.2816

Answer: C

12. The total number of employees who got promoted from all the departments together was what percent of the total number of employees working in all the departments together? (Rounded off the nearest in- teger.

Break-up of employees working in different departments

Total number of employees = 3600

Accounts 20%
Marketing 18%
Production 35%
HR 12%
IT 15%

Break-up of number of males working in each department

Total number of males in the organisation = 2040

Accounts 5%
Marketing 15%
Production 50%
HR 10%
IT 20%

Break-up of number of employees who recently got promoted in each department

Accounts 8%

Production 33%

Marketing 22%

HR 11%

IT 26%
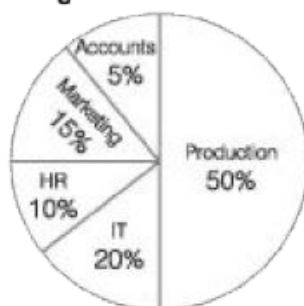
Total number of employees who got promoted = 1200

A. 0.56

B. 0.21

C. 0.45

D. 0.33

Answer: D

13. What is the total number of females working in the production and marketing departments together?
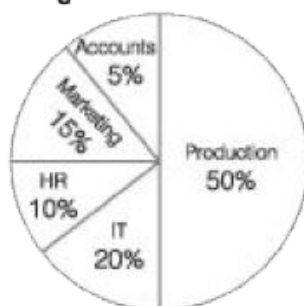
Break-up of employees working in different departments

Total number of employees = 3600

Accounts 20%
Production 35%
Marketing 18%
HR 12%
IT 15%

Break-up of number of males working in each department

Total number of males in the organisation = 2040

Accounts 5%
Marketing 15%
Production 50%
HR 10%
IT 20%

Break-up of number of employees who recently got promoted in each department

Accounts 8%

Production 33%

Marketing 22%

HR 11%

IT 26%

Total number of employees who got promoted = 1200

A. 468

B. 812

C. 582

D. 972

Answer: B

14. If half of the number of employees who promoted from the IT department were males, then what was the approximate percentage of males who got promoted from the number of working males in IT depart- ment?
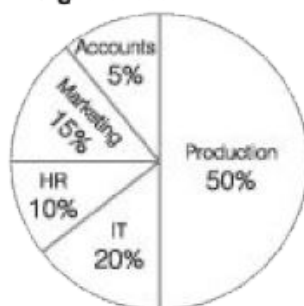
Break-up of employees working in different departments

Total number of employees = 3600

- Accounts 20%
- Marketing 18%
- HR 12%
- IT 15%
- Production 35%

Break-up of number of males working in each department

Total number of males in the organisation = 2040

- Accounts 5%
- Marketing 15%
- HR 10%
- IT 20%
- Production 50%

Break-up of number of employees who recently got promoted in each department

Accounts 8%

Production 33%

Marketing 22%

HR 11%

IT 26%

Total number of employees who got promoted = 1200

A. 0.61

B. 0.29

C. 0.38

D. 0.42

Answer: C

15. How many females work in the accounts department?

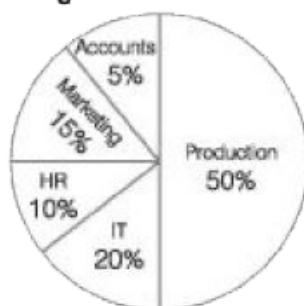**Break-up of employees working in different departments**

Total number of employees = 3600

Accounts 20%
Production 35%
Marketing 18%
HR 12%
IT 15%

Break-up of number of males working in each department

Total number of males in the organisation = 2040

Accounts 5%
Marketing 15%
Production 50%
HR 10%
IT 20%

Break-up of number of employees who recently got promoted in each department

Accounts 8%

Production 33%

Marketing 22%

HR 11%

IT 26%

Total number of employees who got promoted = 1200

A. 618

B. 592

C. 566

D. 624

Answer: A

Watch Video Solution