



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

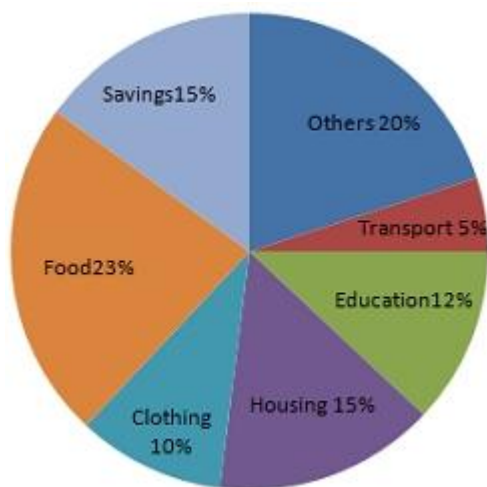
SUBJECT :ArithmeticWork sheet20 answer key

Marks:15Graphical representation of data(Pie Chart)

Date:29.4.2020

Answer all the following questions(1×15=15)

1. Pie chart shows the percent of money spent by family on various item during 1999. Study the graph and answer these questions.



If the total amount spent during the year 1999 was Rs. 46000, the amount spent on food was :

1. **A.** Rs. 2000
2. **B.** Rs. 10580
3. **C.** Rs. 23000
4. **D.** Rs. 2300

Answer & Explanation

Answer: Option B

Explanation:

Amount spent on food = Rs. $(23/100 \times 46,000) = \text{Rs. } 10,580$.

2. If the total amount spent was Rs. 46,000, how much money was spent on clothing and housing together?

1. **A.** Rs. 11500
2. **B.** Rs. 1150
3. **C.** Rs. 10000
4. **D.** Rs. 15000

Answer & Explanation

Answer: Option A

Explanation:

Amount spent on clothing and housing together
= $(10 + 15)/100 \times 46,000 = \text{Rs. } 11,500$

3. The ratio of the total amount of money spent on housing to that spent on education was

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

Answer & Explanation

Answer: Option D

Explanation:

Required ratio = $15 : 12 = 5:4$

4. Graph shows that the maximum amount was spent on

1. **A.** Food
2. **B.** Housing
3. **C.** Clothing
4. **D.** Others

Answer & Explanation

Answer: Option A

Explanation:

As observed from the graph maximum amount was spent on food is 23%

5. If the total expenditure of the family for the year 1999 was Rs. 46,000, the family saved during the year

1. **A.** Rs. 1500
2. **B.** Rs. 15000
3. **C.** Rs. 6900
4. **D.** Rs. 3067 approx

Answer & Explanation

Answer: Option C

Explanation:

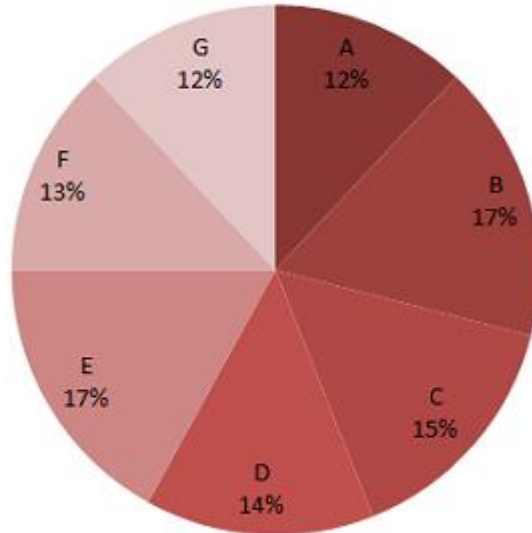
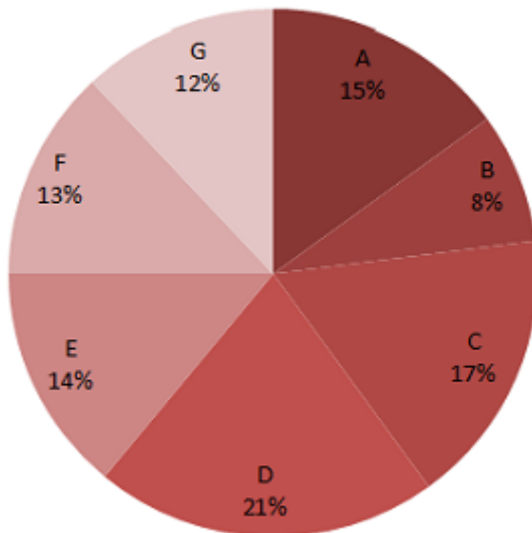
Money saved = Rs. $(15/100 \times 46,000)$ = Rs. 6,900.

6. These questions are based on the following graphs:

Distribution of candidates studying Arts and Commerce from seven different institutes A, B, C, D, E, F and G.

Total number of students studying Arts = 3800

Total number of students studying Commerce = 4200



What is the ratio between the number of students studying Arts from institute E and the number of students studying Commerce from institute D respectively?

1. **A.** 17:19

2. **B.** 19:27
3. **C.** 14:19
4. **D.** 19:21

Answer & Explanation

Answer: Option D

Explanation:

Required ratio = $(14\% \text{ of } 3800)/(14\% \text{ of } 4200) = 19:21$.

7. What is the total number of students studying Arts from institute A and G together?

1. **A.** 1026
2. **B.** 918
3. **C.** 966
4. **D.** 1130

Answer & Explanation

Answer: Option A

Explanation:

Required number = $27\% \text{ of } 3800 = 1026$.

8. How many students are studying Commerce from institute B and D together?

1. **A.** 1158
2. **B.** 1302
3. **C.** 1232
4. **D.** 1272

Answer & Explanation

Answer: Option B

Explanation:

Required number = $31\% \text{ of } 4200 = 1302$.

9. How many students are studying Arts and Commerce from institute B?

1. **A.** 1418

2. **B.** 2000
3. **C.** 1018
4. **D.** 1208

Answer & Explanation

Answer: Option C

Explanation:

Required number = 8% of 3800 + 17% of 4200 = 304 + 714 = 1018.

10. What is the ratio between the number of students studying Arts and Commerce respectively from institute E?

1. **A.** 19:17
2. **B.** 17:29
3. **C.** 19:29
4. **D.** 17:27

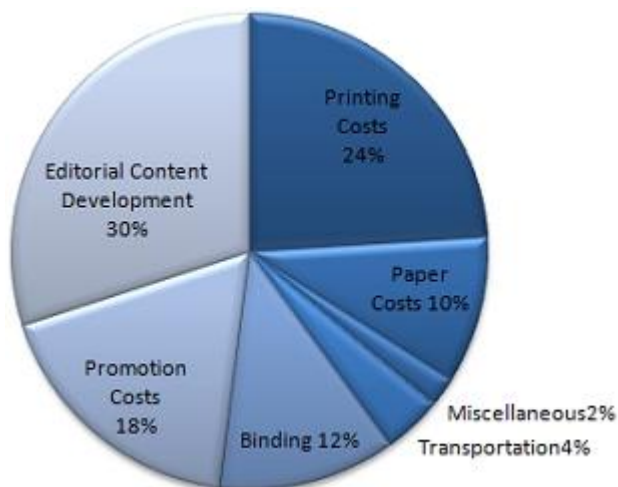
Answer & Explanation

Answer: Option A

Explanation:

Required ratio = (14% of 3800)/(17% of 4200) = 19:17.

11. Following questions are based on the pie chart which gives the expenditure incurred in printing a magazine :



What is the angle for the sector representing paper cost?

- **A.** 10°
- **B.** 36°
- **C.** 23 1/2 °
- **D.** 45°

Answer & Explanation

Answer: Option B

Explanation:

Angle for sector representing paper cost
= $360/100 \times 10 = 36^\circ$

•

12. What should be the central angle of the sector representing transportation charges?

- **A.** 4°
- **B.** 8.4°
- **C.** 12.4°
- **D.** 14.4°

Answer & Explanation

Answer: Option D

Explanation:

Angle for sector representing transportation
= $360/100 \times 4 = 14.4^\circ$

•

13. If the editorial content development cost is Rs. 30,000 then the cost of transportation can be expected to be .

- **A.** Rs. 4000
- **B.** Rs. 400
- **C.** Rs. 12000
- **D.** Rs. 2000

Answer & Explanation

Answer: Option A

Explanation:

30% = Rs. 30,000

1% = Rs. 30,000/30 = 1,000

$$4\% = 4 \times 1,000 = \text{Rs. } 4,000$$

•

14. For a given issue of a magazine, the miscellaneous cost is Rs. 20,000 and the print-run is 12,500 copies. What should be the sale price if the publisher desires a profit of 5%?

- **A.** Rs. 5
- **B.** Rs. 7.50
- **C.** Rs. 8
- **D.** Rs. 8.40

Answer & Explanation

Answer: Option D

Explanation:

Miscellaneous cost = Rs. 20,000

Total cost = Rs. 20,000 \times 5 = 1,00,000

CP per copy = 1,00,000/12,500 = Rs. 8

SP per copy = Rs. 8.40

Profit percentage = $(8.40 - 8)/8 \times 100$

= $0.40/8 \times 100 = 5\%$

Then, sale price = Rs. 8.40

•

15. If the promotional costs for given issue of the magazine is Rs. 9,000, then what is the cost of editorial content development?

1. **A.** Rs. 45,000
2. **B.** Rs. 30,000
3. **C.** Rs. 15,000
4. **D.** Rs. 20,000

Answer & Explanation

Answer: Option C

Explanation:

18% = Rs. 9,000

30% = Rs. 9,000/18 \times 30 = Rs. 15,000

Indranil Ghosh

