

✓
100% : Whole = 1 ✓

75% : 3 Quarters = $\frac{3}{4}$ ✓

50% : Half = $\frac{1}{2}$ ✓

25% : One quarter = $\frac{1}{4}$ ✓ ✓

12.5% = $\frac{1}{8}$ ✓

33% = $\frac{33}{100}$ = .33 ✓

66% = $\frac{66}{100}$ = .66 ✓

1% = $\frac{1}{100}$ ✓

10% = $\frac{1}{10}$ ✓

Degree Values

$$100\% \rightarrow 360^\circ$$

$$10\% \rightarrow \frac{1}{10} \rightarrow \frac{360}{10} = 36^\circ$$

$$1\% \rightarrow \frac{1}{100} \rightarrow \frac{360}{100} = 3.6^\circ$$

Q1. Study the given Pie Chart & answer the questions:

i.) What is family's yearly estimate for Savings & Charity put together?

a.) Rs 1,05,000 /-

b.) Rs 94,500 /-

c.) Rs 78,750 /-

d.) None of these

$100\% = 5,25,000$ - Time Save

$S + C = ? = 10\% + 8\%$ - ✓
 $= 18\%$

$18\% \text{ of } 5,25,000/-$

$10\% = \frac{1}{10} \times 5,25,000$

$18\% = 20\% - 2\%$

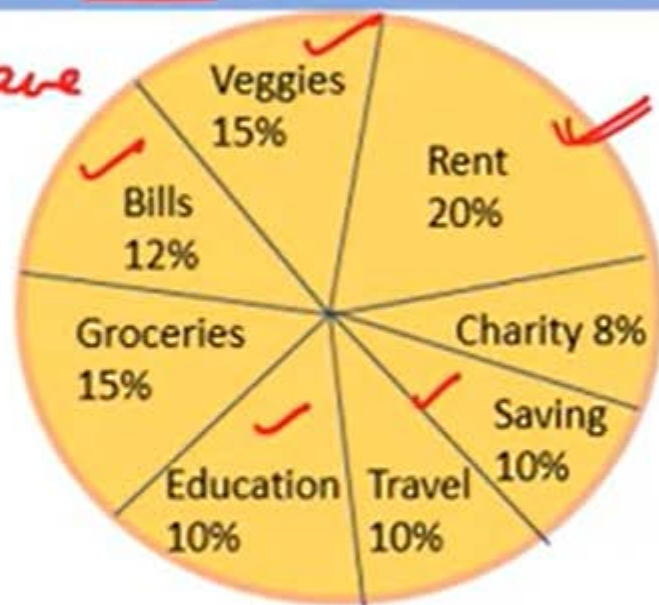
$= \frac{18}{100} \times 5,25,000$ ✓

$= 52,500$

$= 1,05,000 - 2(5250)$ ✓

$= 1,05,000 - 10,500$

✓ $= 94,500 \text{ Rs/-}$



Total Estimated Yearly
Expense: Rs 5,25,000/-

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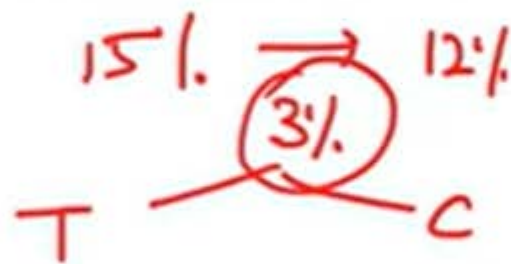
ii.) Online offers made them spend 3% less than the estimates on Groceries. They spent this saved amount equally on Travel & Charity. What will be the difference between expenses on Travel & Charity? Easy

a.) Same as before

b.) Expenses on Travel increased more than the expenses on Charity

c.) None of these

d.) Data Insufficient



$$(i) \quad 10\% - 8\% = 2\%$$

$$(ii) \quad 10\% + \frac{x}{2} - \left(8\% + \frac{x}{2}\right) = 2\%$$

Total Estimated Yearly Expense: Rs 5,25,000/-

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Study the given Pie Chart & answer the questions:

iii.) Expense on Groceries is more than the expense on Travel by what percent?

- a. 150%
- b. 75%
- ☒ c. 50%
- d. 33.3%

Easy.

100% \rightarrow 100 Rs/-

G 15% 15 Rs/-
T 10% 10 Rs/-

$$15 - 10 = 5$$

$$\frac{5}{10} \times 100 = \underline{\underline{50\%}}$$



Total Estimated Yearly
Expense: Rs 5, 25, 000/-

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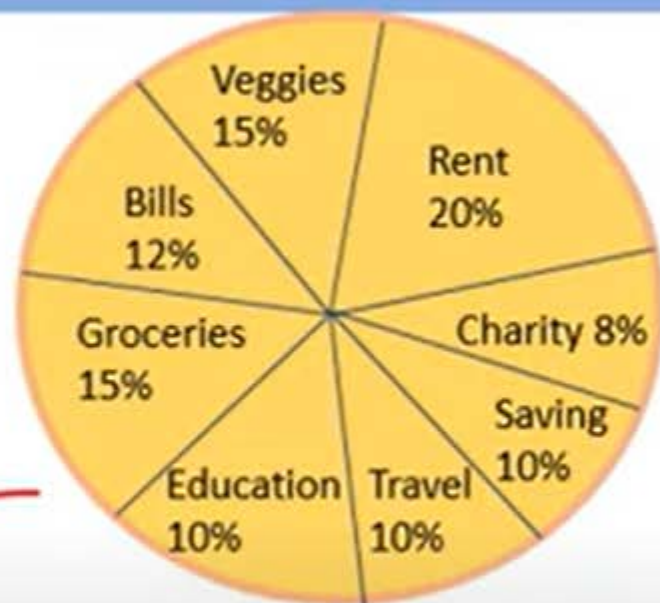
100% \rightarrow 100 Rs/-

G T
15% 10%
15Rs/- 10Rs/-

$$15 - 10 = 5$$
$$\frac{5}{10} \times 100 = \underline{\underline{50\%}}$$

$$\frac{15}{10} \times 100 = 150\%$$

Grocery as % of Travel.



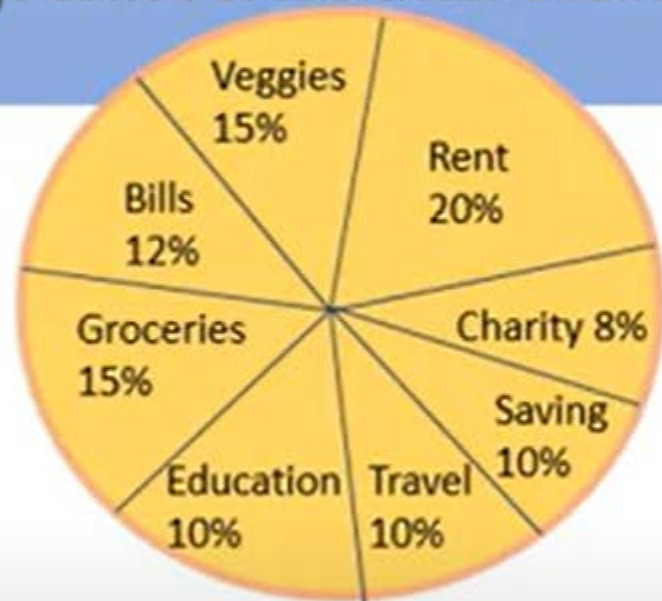
Total Estimated Yearly
Expense: Rs 5, 25, 000/-

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Study the given Pie Chart & answer the questions:

iv.) Other than getting a discount of 10% on rent and saving Rs 15,500 on travel, the family estimated their expenses correctly. What were their actual expenses for the year?



Total Estimated Yearly
Expense: Rs 5, 25, 000/-



$$\begin{array}{r} E = 5,25,000 \quad \checkmark \\ - 26,000 \\ \hline 4,99,000 \end{array}$$
$$\begin{array}{l} \text{(i) Rent} \rightarrow 1,05,000 \\ 10\% \rightarrow \frac{1}{10} \rightarrow 10,500 \\ \hline \text{(ii) } \rightarrow 15,500 \\ \hline \hline 26,000 \end{array}$$

Study the given Pie Chart & answer the questions:

v.) What is the sectorial angle made by "Charity" sector? *→ imp. easy.*

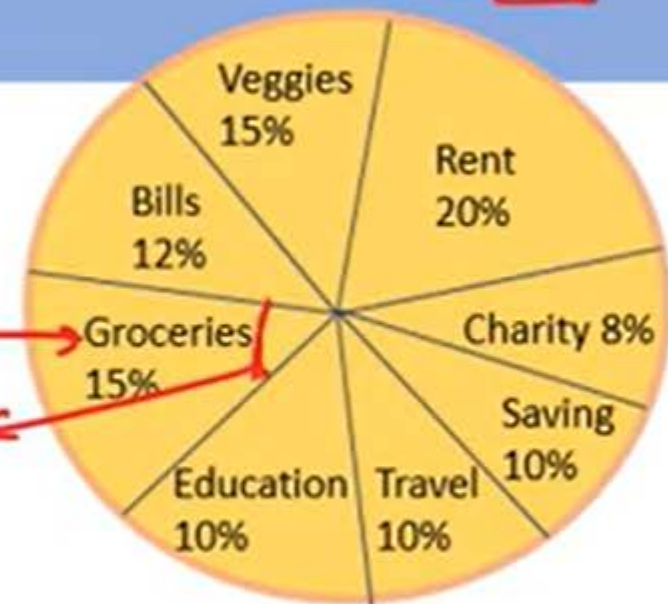
- a.) 36° b.) 25° c.) 28.8° d.) 35.6°

100% 360° ○

$$1\% = \frac{360}{100} = 3.6^\circ$$

$$C \rightarrow 8\% \rightarrow 8 \times 3.6 = 28.8^\circ$$

*Sector
sectorial
angle*



Total Estimated Yearly
Expense: Rs 5, 25, 000/-

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Q2. Pehalgam gets tourists from country X and Y. Percentage wise distribution of the influx of tourists is given for first half of the year.

i.) What is the ratio of tourists from country Y coming in during April and May?



Total no. of tourists = 90,000

Month	Ratio (X:Y)
Jan	8 : 7
Feb	4 : 5
March	3 : 2
April	7 : 5
May	7 : 8
June	4 : 11

$$\frac{A}{M} = \frac{\left(\frac{8}{100} \times 90,000\right) \times \frac{5}{12}}{\left(\frac{12}{100} \times 90,000\right) \times \frac{8}{15}}$$

$$A \rightarrow \frac{7}{12} ; \left(\frac{5}{12}\right)$$

$$M \rightarrow \frac{7}{8} \rightarrow \frac{8}{15}$$



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$$= \frac{8 \times 5}{12 \times 8} = \frac{5}{12} \times \frac{15}{12} = \frac{25}{48} = \underline{\underline{25:48}}$$

$$A \rightarrow 7:5 \rightarrow \frac{7}{12} ; \left(\frac{5}{12}\right)$$

$$M \rightarrow 7:8 \rightarrow \frac{8}{15}$$

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Q2. Pehalgam gets tourists from country X and Y. Percentage wise distribution of the influx of tourists is given for first half of the year.

ii.) If 55% of the tourists from City X in May were adults, how many were children?

Easy

$$\text{May} \rightarrow \frac{12}{100} \times 90,000 = 12 \times 900$$

$$\text{May} \rightarrow 7:8 \rightarrow \frac{7x}{15x} \checkmark$$

$$\frac{7x}{15} \times (12 \times 900) \times \frac{45}{100}$$



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$$\text{May} \rightarrow 7:8 \rightarrow \frac{7x}{15x} \checkmark$$

$$\frac{7x}{15} \times (12 \times 900) \times \frac{45}{100} =$$

$$7 \times 12 \times 9 \times 3$$

$$= 108 \times 21$$

$$= 2268 \rightarrow \text{children}$$



Total no. of tourists = 90,000

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Jan	8 : 7
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Q2. iii.) If the average expenditure by a tourist from Country X was Rs 10,000/- during the season. What was the total expenditure by tourist from Country X in Feb. ?

$$\begin{aligned} \text{Feb} &\rightarrow \frac{22}{100} \times 90,000 \\ &= 22 \times 900 \end{aligned}$$

$$\text{Feb} \rightarrow 4:5 \Rightarrow \frac{4x}{9x} = \frac{4}{9}$$

$$\text{Feb} \rightarrow \frac{4}{9} \times (22 \times 900) \times 10,000$$



Total no. of tourists = 90,000

Month	Ratio (X:Y)
Jan	8 : 7
Feb	4 : 5
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Q3. Sales of a distribution company dealing in sports goods are as follows :

i.) Which of the following goods contribute to half of the business?

a.) Indoor Games + Cricket Bat $\rightarrow 72 + 18 = 90^\circ \times$

☒ b.) Cricket Uniform + Cricket Bat + Others $\rightarrow 72 + 18 + 90 = 180^\circ$ ✓✓

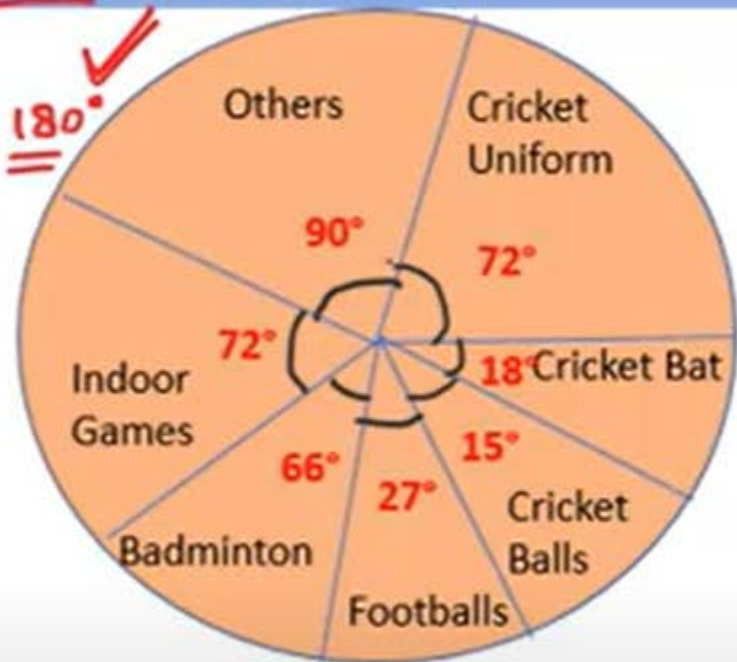
c.) Badminton + Footballs + Cricket Bat + Cricket Balls

d.) None of the above

360° ✓ \rightarrow Total Sales

$180^\circ \rightarrow$

✓



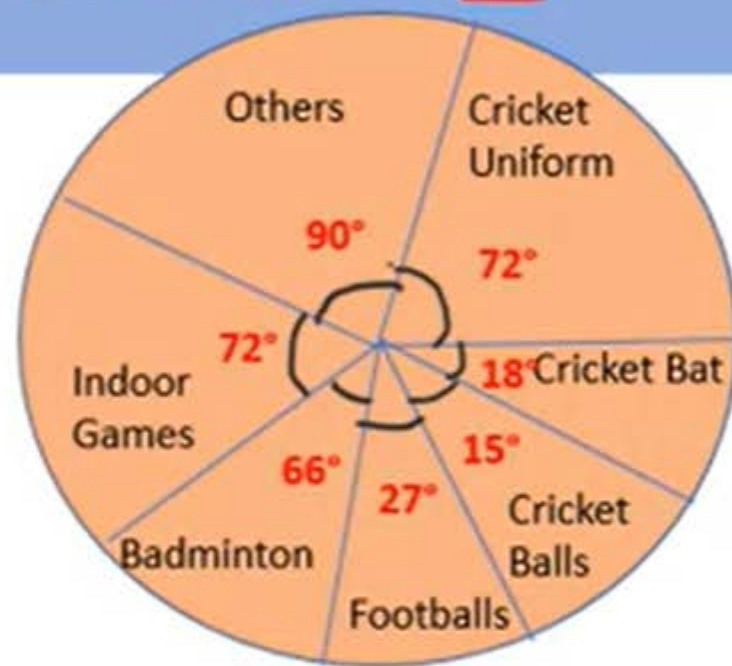
Q3. Sales of a distribution company dealing in sports goods are as follows

ii.) If the sales from Cricket uniforms are 9,50,000 Rs/-, what is the ratio between sales from Cricket bat and Badminton?

$$\textcircled{1} \quad 72^\circ \rightarrow 9,50,000; \quad \frac{9,50,000}{72} \times 360 \quad \checkmark$$

$$\frac{C.B}{B.M.} \checkmark = ? \quad \times$$

$$\frac{C.B}{B.M.} = \frac{18 \times 8}{66 \times 8} = \frac{18}{66} = \frac{3}{11} = 3:11$$



Q3. Sales of a distribution company dealing in sports goods are as follows

iii.) What percent of sales come from the sales of Badminton ?

- ~~a.) 20%~~ ☒ b.) 18.3% ~~c.) 20.5%~~ ~~d.) 21.2%~~

$$\begin{aligned} 66^\circ \\ 360^\circ &\rightarrow 100\% \\ 100\% &\rightarrow 360^\circ \\ 20\% &\rightarrow 72^\circ \rightarrow \underline{\underline{66^\circ}} \checkmark \end{aligned}$$

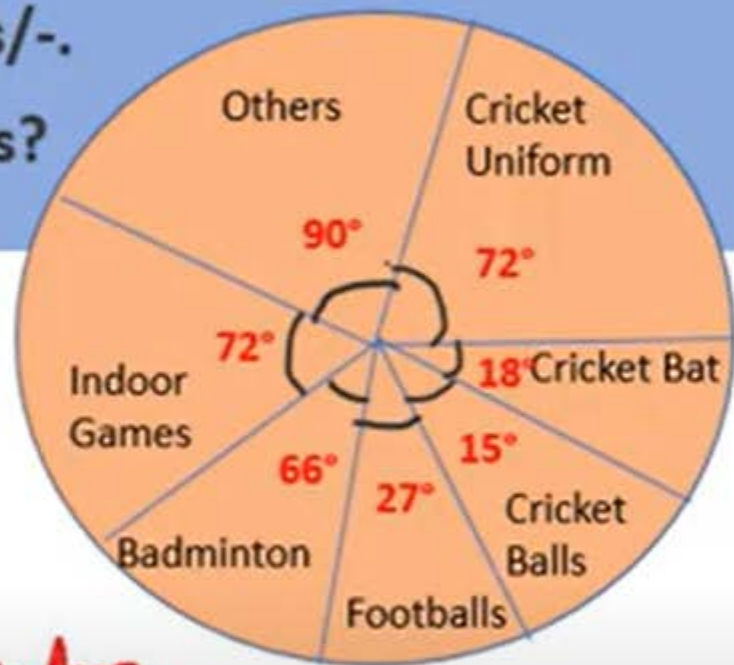


Q3. Sales of a distribution company dealing in sports goods are as follows

iv.) If the sales from Cricket Uniform are 9,50,000 Rs/-.

what is the average sales of Footballs & Cricket Balls?

- a. 2,50,000 Rs/- b.) 2,77,083 c.) 3,00,000 d.) 3,17,000



$$72^\circ \rightarrow 9,50,000$$

$$FB + CB \rightarrow 27^\circ + 15^\circ = 42^\circ$$

$$\frac{9,50,000}{72} \times 42 = \frac{9,50,000 \times 7}{12 \times 2} = \text{Avg.}$$

Practice Questions

Q1. Find the sectorial angle formed by a section representing 23% data in the Pie Chart. Answer: 82.8°

2. A sector forms 144° sectorial angle in a Pie Chart. What percent of data does this sector represent? Answer: 40%