

Pie Chart

Solution

1. **Answer: (B)**
Let total cars manufactured by Daewoo in 2015 = $200x$
So, Let total cars manufactured by Daewoo in 2016 = $225x$
Cars manufactured by Zen in 2015

$$= \frac{20}{100} \times \frac{225x}{10} \times 40$$

$$= \frac{225x}{5} \times 4$$

$$= 45 \times 4 \times x$$

$$= 180x$$

Required ratio = $200 : 180$

$$= 10 : 9$$
2. **Answer: (D)**
Let total cars manufactured in 2016 = $100x$
Cars manufactured by Maruti in 2016 = $40x$
Cars manufactured by Zen and Esteem in 2015 = $\frac{30}{100} \times 40x \Rightarrow 12x$
Required ratio = $12 : 10$

$$= 6 : 5$$
3. **Answer: (C)**
Model Esteem of Maruti manufactured in 2015 = 15000
Total Maruti cars manufactured in 2015

$$= \frac{15000}{10} \times 100$$

$$= 1,50,000$$

Average of cars of Hyundai and Daewoo manufactured in 2016

$$= \frac{1}{2} (25 + 10) \times \frac{150000}{40}$$

$$= 65625$$
4. **Answer: (E)**
Let total cars manufactured of Maruti in 2016 = $900x$
So, cars sold of Maruti in 2016 = $800x$
Cars of model Zen manufactured by Maruti in 2015

$$= 900x \times \frac{20}{100}$$

$$= 180x$$

Required percentage = $\frac{180}{800} \times 100 = 22.5\%$
5. **Answer: (B)**
Let Hyundai cars manufactured in 2016 = $500x$
So, Hyundai cars sold in 2016 = $400x$
And
Maruti 800 manufactured in 2015

$$= \frac{500x}{25} \times 40 \times \frac{60}{100}$$

$$= 480x$$

Maruti 800 sold in 2015

$$= \frac{90}{100} \times 480x$$

$$= 432x$$

Required ratio = $400 : 432$

$$= 25 : 27$$
6. **Answer: (B)**
Numbered of candidates appeared at Centre B = $\frac{20 \times 4000}{100} = 800$
Numbered of candidates selected = $10\% = \frac{10 \times 800}{100} = 80$
7. **Answer: (A)**
Candidates appeared at Centre D on (weekends + weekdays) = $\frac{18 \times 4000}{100} = 720$
Candidates appeared at Centre B on weekends = $\frac{35 \times 1500}{100} = 525$
Ratio = $720 : 525 = 48 : 35$
8. **Answer: (D)**
Candidates appeared at Centre A and B together on weekends = $\frac{65 \times 1500}{100} = 975$
Candidates appeared at Centre B and E together on (weekends + weekdays)

$$= \frac{42 \times 4000}{100} = 1680$$

Percentage = $\frac{975}{1680} \times 100 = 58.03 = 58\%$
9. **Answer: (C)**
Candidates appeared at Centre A, B and D on weekends = $\frac{85 \times 1500}{100} = 1275$
Average = $\frac{1275}{3} = 425$
10. **Answer: (C)**

Candidates appeared at Centre C on

$$\text{weekends} = \frac{10 \times 1500}{100} = 150$$

Candidate appeared at Centre B on

$$(\text{weekends} + \text{weekdays}) = \frac{20 \times 4000}{100} = 800$$

$$\text{Percentage} = \frac{800 - 150}{800} \times 100 = 81.25\% = 81\%$$

11. **Answer: (A)**

Total orange sold on Monday

$$= 600 \times 12/100 = 72$$

Total orange sold on Wednesday

$$= 600 \times 18/100 = 108$$

Total orange sold on Monday

$$\text{and Wednesday} = 72 + 108 = 180$$

The average number of orange sold on

$$\text{Monday, Wednesday together} = 180/2 = 90$$

Total orange sold on Tuesday

$$= 600 \times 20/100 = 120$$

Total orange sold on Thursday

$$= 600 \times 14/100 = 84$$

Total orange sold on Saturday

$$= 600 \times 8/100 = 48$$

Total orange sold on Tuesday, Thursday,

$$\text{and Saturday} = 120 + 84 + 48 = 252$$

The average number of orange sold on

$$\text{Tuesday, Thursday, and Saturday}$$

$$= 252/3 = 84$$

$$\text{Difference} = 90 - 84 = 6$$

∴ The difference between the average

number of orange sold on Monday,

Wednesday to Tuesday, Thursday, and

Saturday is 6

Total % of orange sold on Monday and

$$\text{Wednesday together} = 12\% + 18\% = 30\%$$

Total number of orange sold on Monday and

$$\text{Wednesday together} = 600 \times 30/100 = 180$$

The average number of orange sold on

$$\text{Monday, Wednesday together} = 180/2 = 90$$

Total % of orange sold on Tuesday,

Thursday, and Saturday together

$$= 20\% + 14\% + 8\% = 42\%$$

Total number of orange sold on Tuesday,

Thursday, and Saturday together

$$= 600 \times 42/100 = 252$$

The average number of orange sold on

Tuesday, Thursday, and Saturday

$$= 252/3 = 84$$

$$\text{Difference} = 90 - 84 = 6$$

∴ The difference between the average

number of orange sold on Monday,

Wednesday to Tuesday, Thursday, and

Saturday is 6

12. **Answer: (C)**

Total oranges sold on Monday

$$= 600 \times 12/100 = 72$$

Total oranges sold on Sunday

$$= 600 \times 12/100 = 72$$

Total oranges sold on Monday and Sunday

$$= 72 + 72 = 144$$

Total oranges sold on Wednesday

$$= 600 \times 18/100 = 108$$

Difference between the total oranges sold on

Monday and Sunday together to total

oranges sold on Wednesday = 144 - 108

$$= 36$$

∴ The difference between the total oranges

sold on Monday and Sunday together to

total oranges sold on Wednesday is 36

13. **Answer: (D)**

Total % of oranges sold on Tuesday and

$$\text{Friday} = 36\%$$

Total % of oranges sold on Wednesday and

$$\text{Sunday} = 30\%$$

$$\text{Required Ratio} = 36 : 30 = 6 : 5$$

∴ **The ratio of oranges sold on Tuesday**

and Friday to Oranges sold on

Wednesday and Sunday is 6 : 5

14. **Answer: (E)**

Total orange sold on Wednesday

$$= 600 \times (18/100) = 108$$

Total orange sold on Friday

$$= 600 \times (16/100) = 96$$

Total orange sold on Wednesday and Friday

$$= 108 + 96 = 204$$

Total orange sold on Monday

$$= 600 \times 12/100 = 72$$

Total orange sold on Tuesday

$$= 600 \times 20/100 = 120$$

Total orange sold on Saturday = $600 \times 8/100$
= 48

Total orange sold on Monday, Tuesday, and Saturday = $72 + 120 + 48 = 240$

Now required percentage
= $[(204 - 240)/240] \times 100 = -15\%$

∴ The total number of oranges sold on Wednesday and Friday together is 15% less than the number of oranges sold on Monday, Tuesday and Saturday together

Total orange sold on Wednesday and Friday = $18\% + 16\% = 34\%$

Total orange sold on Monday, Tuesday, and Saturday = $12 + 20 + 8 = 40\%$

Now required percentage = $[(34 - 40)/40] \times 100 = -15\%$

∴ The total number of oranges sold on Wednesday and Friday together is 15% less than the number of oranges sold on Monday, Tuesday and Saturday together

15.

Answer: (C)

Total orange sold on Tuesday

= $600 \times (20/100) = 120$

Total orange sold on Friday

= $600 \times (16/100) = 96$

Total orange sold on Tuesday and Friday

= $120 + 96 = 216$

We know that, $360^\circ = 600$

$\Rightarrow 600 = 360^\circ$

$\Rightarrow 1 = 360^\circ/600 = 3/5$

$\Rightarrow 216 = (3/5) \times 216 = 648/5 = 129.6^\circ$

∴ The central angle made by the oranges sold on Tuesday and Friday together is 129.6°

Total orange sold on Tuesday = 20%

Total orange sold on Friday = 16%

Total orange sold on Tuesday and Friday

= $20\% + 16\% = 36\%$

So, $100\% = 360$

Then, $36\% = (360/100) \times 36 = 129.6^\circ$

∴ The central angle made by the oranges sold on Tuesday and Friday together is 129.6°

16.

Answer: (D)

Average percentage of book sold by B and D together = $(18 + 22)/2 = 20\%$

Percentage of book sold by A = 20%

∴ Required ratio = 1 : 1

17.

Answer: (C)

Average percentage of book sold by B and E together = $(22 + 26)/2 = 24\%$

Average percentage of book sold by C and D together = $(18 + 14)/2 = 16\%$

Percentage difference = $24 - 16 = 8\%$

∴ Required difference = 8% of 750 = 60

18.

Answer: (B)

Percentage of book sold on Tuesday

= $20 \times 115/100 = 23\%$

Percentage of book sold by D on Monday

= 18%

∴ Required percentage = $(23 - 18) \times 100/18$
= $500/18 = 27.78\%$

19.

Answer: (E)

Percentage of books sold by D and E together = 44%

Percentage of book sold by B and D together = 40%

∴ Ratio of angle made on pie chart

= $(44 \times 360/100) : (40 \times 360/100) = 11 : 10$

20.

Answer: (A)

Percentage of books sold on Monday by B = 22%

So book sold by B = 22% of 750 = 165

∴ Book sold by F = $165 \times 120/100$

= $165 \times 6/5 = 198$