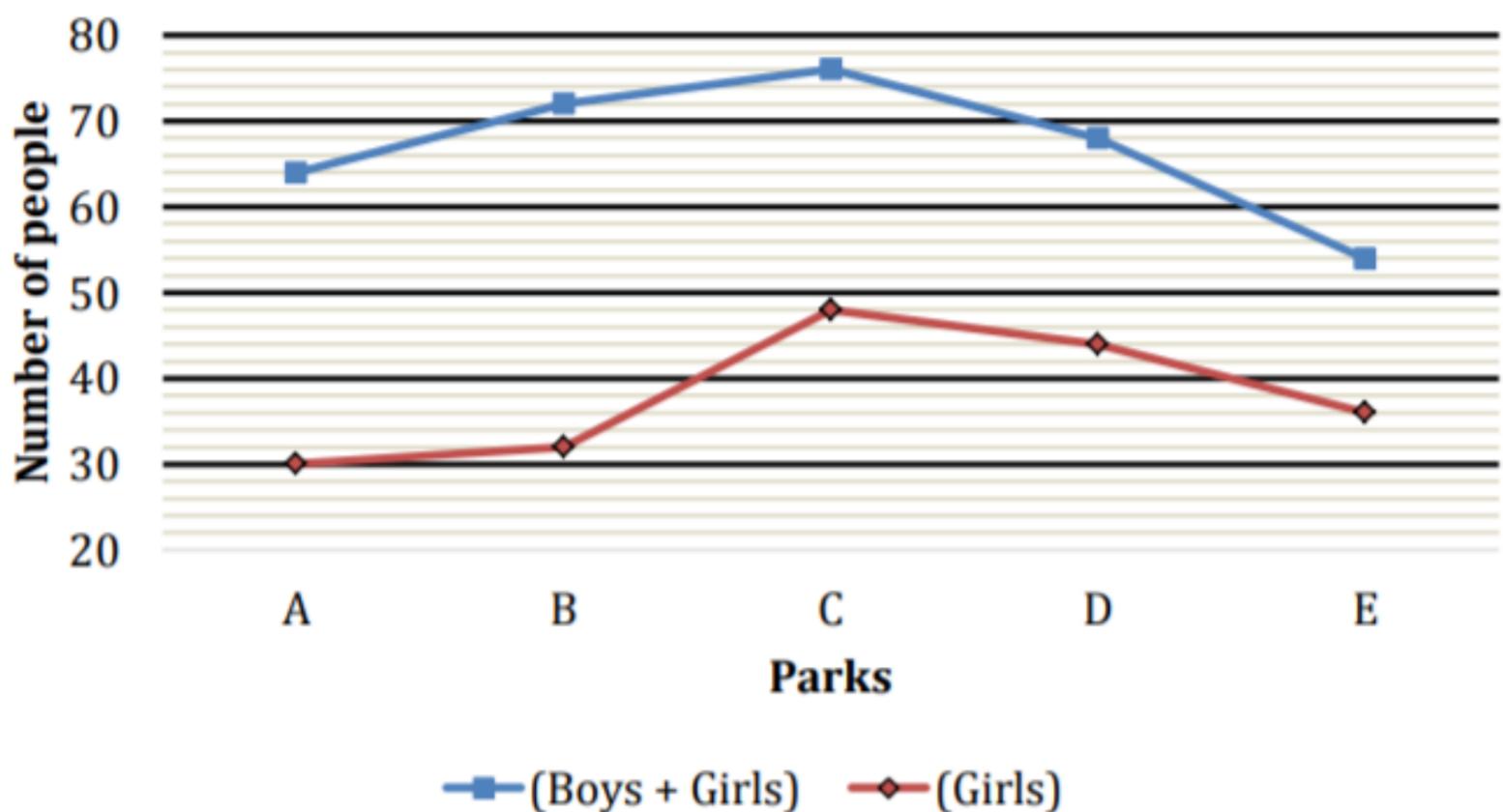


# Banking Daily Quiz Blog - February 23



1. Read the instruction carefully and answer the questions based on it.

The Line graph shows the number of people (Boys + girls) visited five (A, B, C, D & E) different parks and the number of girls visited out of total people visited these five parks.



- A. If total number of people visited in park F are 18 more than total number of people visited in park C and D together and out of total people visited in park F,  $\frac{4}{9}th$  are girls, then what will be the number of boys visited in park F?

A

80

B 108

C 90

D 100

E 105

### Solution

As per data given in the graph,

Total people visited in park F will be  $76 + 68 + 18 = 162$

So, number of boys visited in park F will be,

$$162 \times \frac{5}{9} = 90$$

- B. What percent of girls visited in park A with respect to the total number of people (Boys + Girls) visited that park (approximately)?**

A 47%

B 45%

C 40%

D 42%

**E** 50%

### Solution

As per data given in the graph,

Required percentage will be,

$$\frac{30}{64} \times 100\% = 46.875\% \approx 47\%$$

**C. If park E charge Rs. 24 for each people (Boys + Girls) who visited the park, then what will be the total revenue get by park E?**

**A** Rs. 1240

**B** Rs. 1250

**C** Rs. 1096

**D** Rs. 1296

**E** Rs. 1248

### Solution

As per data given in the graph,

Total revenue will be,

$$24 \times 54 = \text{Rs. } 1296$$

D. Total people (Boys + Girls) who visited park B is what percent more than total people (Boys + Girls) who visited park E?

A  $33\frac{1}{3}\%$

B  $33\frac{2}{3}\%$

C  $30\frac{2}{3}\%$

D  $30\frac{1}{3}\%$

E 33%

### Solution

As per data given in the question,

Required percentage will be,

$$\frac{72-54}{54} \times 100 = \frac{18}{54} \times 100\% = 33\frac{1}{3}\%$$

E. What will be the total number of boys visited in park A, B & C together?

A 112

B 102

B 72

C 104

D 102

E 100

### Solution

As per data given in the graph,

$$\begin{aligned} \text{Required sum will be} &= (64 - 30) + (72 - 32) + (76 - 48) \\ &= 34 + 40 + 28 = 102 \end{aligned}$$

2. A man invested a sum at a certain rate of interest on simple interest and he got 60% more amount after eight year. If he invests *Rs.* 9600 at the same rate of interest on SI, then what will be the total interest he would get after four years?

A *Rs.* 2580

B *Rs.* 2500

C *Rs.* 2860

D *Rs. 2800*

E *Rs. 2880*

### Solution

Let sum invested by man =  $100x$

So, Amount will be =  $\frac{160}{100} \times 100x = 160x$

Let the percentage rate is  $r\%$

So,

$$100x \times r \times \frac{8}{100} = 160x - 100x$$

$$r = 7.5\%$$

Hence, interest will be  $\frac{9000 \times 7.5 \times 4}{100} = \text{Rs. } 2880$

3. **A is 40% more efficient than B and both together can complete a work in  $9\frac{3}{8}$  days. If A work for first five days alone and remaining work complete by B, then find in how many days total work will be competed.**

A  $20\frac{1}{4}$  days

B  $20\frac{1}{2}$  days

C  $22\frac{1}{2}$  days

D  $15\frac{1}{2}$  days

E  $20\frac{1}{3}$  days

### Solution

Let efficiency of B =  $5x$  unit/day

So, efficiency of A will be  $5x \times \frac{140}{100} = 7x$  unit/day

Hence,

Total work will be  $(7x + 5x) \times \frac{75}{8} = \frac{225x}{2}$  units

Hence,

Number of days required will be  $5 + \frac{\frac{225x}{2} \times 35}{5x} = 20\frac{1}{2}$  days

4. Train 'A' running at speed of 54 km/hr crosses a platform of length same as that of the train in 36 sec. If train B, which is 230 meters long crosses the same platform in 25 sec, then find the speed of train B (in km/hr).

A 75 Km/Hr.

B 78 Km/Hr.

C 72 Km/Hr.

**D** 70 Km/Hr.

**E** 54 Km/Hr.

### Solution

Let length of train 'A' and platform each be  $L$  meters

So,

$$\frac{L+L}{36} = 54 \times \frac{5}{18}$$

$$L = 270 \text{ m}$$

Let speed of train B be  $y$  km/hr

So,

$$\frac{230+270}{25} = y \times \frac{5}{18}$$

$$y = 72 \text{ Km/Hr.}$$

5. **Four years ago, ratio of age of A and B was 3 : 4, Average of present age of A, B and C is 26 years. C is 11 years younger than B. what is the present age of B?**

**A** 32 years

**B** 30 years

**C** 25 years

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**D** 21 years

**E** 35 years

### Solution

Let present age of A, B and C be  $x$ ,  $y$  and  $z$  years respectively.

So, As per question,

$$\frac{x-4}{y-4} = \frac{3}{4}$$

$$4x - 3y = 4 \dots\dots\dots (i)$$

As,

$$x + y + z = 26 \times 3 = 78 \text{ years} \dots\dots\dots (ii)$$

$$z = y - 11 \dots\dots\dots (iii)$$

After solving (i), (ii) and (iii) we will get,

$$x = 25, y = 32, z = 21 \text{ years}$$

So, Present age of B will be =  $y = 32 \text{ years}$

**6. A man deposit 10% of his salary in PF. He saves 30% of the remaining. The ratio of his expense on medicine and groceries is 3 : 4 of the remaining salary after saving. If his expense on the medicine was Rs 2700. Find the monthly salary.**

**A** Rs. 10800

**B** Rs. 10000

(C) Rs. 12000

(D) Rs. 15000

(E) Rs. 18000

### Solution

Let monthly salary =  $100x$

So,

$$100x \times \frac{90}{100} \times \frac{70}{100} = 63x$$

Let total expense on medicine and groceries  $3y + 4y = 7y$

So,

$$7y = 63x$$

$$y = 9x$$

As, given  $3y = 2700$

$$\text{So, } y = 900$$

$$\text{So, } x = \frac{900}{9} = 100$$

Hence, monthly salary will be =  $100x = \text{Rs. } 10000$

7. In a mixture of milk and water, the proportion of milk by weight is 60%. If from the 80 gm mixture, 20 gm of mixture is taken out and 6 gm of pure water is added to the mixture then find the ratio of milk and water in the new mixture.

(A) 1:3

B 5:6

C 6:5

D 4:5

E 2:3

### Solution

Ratio of Milk and water in mixture =  $60 : 40 = 3 : 2$

Quantity of Milk left in mixture after 20 gm of mixture is taken out will be,

$$60 \times \frac{3}{5} = 36 \text{ gm.}$$

Quantity of water left will be,

$$60 \times \frac{2}{5} = 24 \text{ gm}$$

Hence, required ratio will be =  $\frac{36}{24+6} = 36 : 30 = 6 : 5$

8. A sphere is melted and molded into solid cylinder. If radius of both solids is equal, then find the ratio of total surface area of sphere to the total surface area of cylinder

A 1:4

D 2:5

D 4:5

C 6:7

D 4:7

E 3:5

### Solution

Let radius of sphere and cylinder is  $r$

So, volume of sphere  $\frac{4}{3}\pi r^3$

Volume of cylinder = Volume of sphere

So,

$$\frac{4}{3}\pi r^3 = \pi r^2 h$$

$$\text{So, } h = \frac{4}{3}r$$

$$\text{TSA of sphere} = 4\pi r^2$$

$$\text{TSA of cylinder} = 2\pi r(r + h) = 2\pi r\left(r + \frac{4r}{3}\right) = \frac{14}{3}\pi r^2$$

Hence,

$$\text{Required ratio will be } [4\pi r^2] : \left[\frac{14}{3}\pi r^2\right] = 6 : 7$$

9. Three partners P, Q and R invested their amounts in ratio of 2 : 5 : 7. At the end of 6 months, 'P' added some more amount such that his investment become equals to half of sum of 'Q' and 'R' initial investment. If at the end of the year, Q's share in profit is Rs 425, then find the total profit.

**A** Rs. 1360

**B** Rs. 1260

**C** Rs. 1320

**D** Rs. 1500

**E** Rs. 1760

### Solution

Let investment of P, Q, R be  $2x$ ,  $5x$  and  $7x$  respectively.

Let extra amount added by 'P' after six months be Rs.  $y$

So, As per question,

$$2x + y = \frac{1}{2}[5x + 7x]$$

$$2x + y = 6x$$

$$y = 4x$$

Ratio of profit share will be

$$P : Q : R = [(2x \times 6) + (4x + 2x) \times 6] : [5x \times 12] : [7x \times 12]$$

$$4 : 5 : 7$$

As,

$$Q's \text{ share of profit} = Rs \ 425$$

$$5' \text{ share} = 425$$

$$1' \text{ share} = Rs. \ 85$$

So,

Total profit will be

$$(4 + 5 + 7)' \text{ share} = 16' \text{ share} = 16 \times 85 = \text{Rs. } 1360$$

10. A shopkeeper marks up price of LED 60% above its cost price and gives three successive discounts of  $12\frac{1}{2}\%$ ,  $d\%$  and 25%. If shopkeeper made a loss 16% on LED. Find the second discount allowed by shop.

A 17.5%

B 22.5%

C 10%

D 20%

E 25%

### Solution

Let C.P. of LED =  $100x$

M.P of LED =  $160x$

First discount will be  $160 \times \frac{1}{8} = 20x$

Second and third discount will be,

$$(160x - 20x) \times \frac{100-d}{100} \times \frac{100-25}{100} = 84x$$

$$140x \times \frac{100-d}{100} \times \frac{3}{4} = 84x$$

$$21(100-d) = 84 \times 20$$

$$21d = 2100 - 1680$$

$$420 - 4200 - 1000$$

$$d = \frac{420}{21} = 20\%$$

11. Speed of a boat in still water is 12 kmph and speed of stream is  $x$  kmph. If in traveling 270 km upstream boat takes  $66\frac{2}{3}\%$  more time than traveling 270 km downstream, then find the value of  $x$ .

**A** 4.5 Kmph

**B** 6 Kmph

**C** 4 Kmph

**D** 3 Kmph

**E** 5 Kmph

### Solution

Speed of boat in still water = 12 kmph

Speed of Stream =  $x$  kmph

So, As per question,

$$\frac{270}{12-x} = (100 + 66\frac{2}{3})\% \text{ of } \frac{270}{12+x}$$

$$\frac{270}{12-x} = \frac{5}{3} \text{ of } \frac{270}{12+x}$$

$$\frac{270}{12-x} = \frac{450}{12+x}$$

$$\frac{3}{12-x} = \frac{5}{12+x}$$

$$36 + 3x = 60 + 5x$$

$$50 + 5x = 50 - 5x$$

$$8x = 24$$

$$x = 3$$

Hence, speed of stream will be =  $3 \text{ Kmph}$

