

DI Info Chart Questions for SBI Clerk Pre, IBPS Clerk Pre, LIC Assistant Pre and RRB Assistant Pre Exams.

DI Info Chart No 42

Directions: Study the following information carefully and answer the questions given beside.

A survey was conducted among the tourists who visited North India. It was found that the number of tourists who visited any two among the three cities Hrishikesh, Somnath and Kasi is the same. The number of tourists who visited all the three cities is the same as the number of tourists who visited, none of the three, which in turn is equal to 1/3rd of the number of tourists who visited only Kasi. The number of tourists who visited only Hrishikesh is the same as half the number of tourists who visited only Kasi and is the same as the number of tourists who visited only Somnath. Half of the tourists who visited Somnath visited at least one of the other two cities.

What percentage of the tourists who visited Hrishikesh visited the other two cities 1. also? B. $69\frac{1}{2}\%$ C. $66\frac{2}{2}\%$ D. $44\frac{1}{2}\%$ E. $12\frac{1}{2}\%$

A. 33 $\frac{1}{2}$ %

- If 200 tourists did not visit any of the three cities, then how many tourists were 2. surveyed?

A. 2200

- B. 1500
- C. 2250
- D. 1750
- E. 1680
- What percentage of the total number of tourists surveyed, visited exactly one among 3. three cities?

- A. $69\frac{1}{7}\%$ B. $68\frac{4}{7}\%$ C. $56\frac{5}{11}\%$ D. $62\frac{1}{5}\%$ E. $54\frac{6}{11}\%$
- What percentage of the tourists who visited at least one of the cities has visited 4. exactly two cities?

A. $9\frac{21}{31}\%$

- B. $10\frac{21}{31}\%$ C. $6\frac{21}{31}\%$ D. $11\frac{21}{31}\%$ E. $15\frac{21}{31}\%$
- 5. If 30 tourists visited both Hrishikesh and Somnath, then how many tourists has visited Kasi?

A. 6 hours

- B. $6\frac{3}{4}$ hours C. $8\frac{1}{2}$ hours D. $7\frac{3}{4}$ hours E. None of these

Correct Answers:

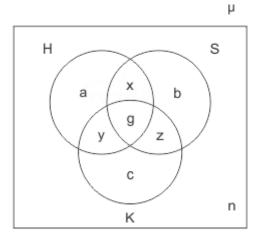
1	2	3	4	5
Α	D	В	Α	С





Common explanations:

Let us represent the given information in the following Venn diagram.



H – Hrishikesh

S – Somnath

K – Kasi

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It is given that the number of tourists who visited any two among the three is the same.

$$x = y = z$$

Let
$$x = y = z m ...(1)$$

The number of tourists who visited all the three cities = g = the number of tourists who visited none of the three = n

 \rightarrow (1/3) x number of tourists who visited only Kasi i.e c/3

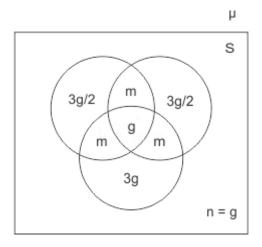
$$g = n = \frac{c}{3}...(2)$$

and also it is given that $a = b = \frac{c}{2}$...(3)

Half of the tourists who visited Somnath visited at least one of the other two.

$$b = x + z + g ...(4)$$

The Venn diagram can be drawn as follows:



And
$$\frac{3g}{2} = 2 \text{ m} + g \text{ (since b} = x + z + g)$$

$$\Rightarrow$$
 2m = $\frac{3g}{2}$ - g = $\frac{g}{2}$ \Rightarrow g = 4 m

$$=\frac{3g}{2}+\frac{3g}{2}+3g+\frac{3g}{4}+g+g=\frac{35g}{4}=\mu$$



The Question Bank



Answers:

1. Following the common explanation, we get

To find what percent of a + x + y + g is g.

i.e.,
$$\frac{3g}{2} + \frac{g}{4} + g + \frac{g}{4} = 3g$$

The reqd.
$$\% = \frac{100g}{3g} = 33\frac{1}{3}\%$$

Hence, option A is correct.

2. Following the common explanation, we get

It is given that,

$$\rightarrow$$
 g = 200

$$\mu = \frac{35 \times 200}{4} = 1750$$



The Question Bank

Hence, option D is correct.

3. Following the common explanation, we get

The total number of tourists surveyed = $\frac{35g}{4}$

The number of tourists who visited exactly one among the three cities = a + b + c = 6g

The reqd.
$$\% = \frac{6g \times 100}{35g/4} = 68 \frac{4}{7} \%$$

Hence, option B is correct.



4. Following the common explanation, we get

The number of tourists who visited at least one of the three cities

$$= \mu - n = \frac{35g}{4} - g = \frac{31g}{4}$$

The number of tourists who visited exactly two cities

$$= x + y + z = \frac{3g}{4}$$

The reqd.
$$\% = \frac{3g}{4} \times 100 \times \frac{4}{31g} = \frac{300}{31} = 9\frac{21}{31}\%$$

Hence, option A is correct.

5. Following the common explanation, we get

Given
$$x + g = 30$$

$$\Rightarrow \frac{g}{4} + g = 30$$

$$\Rightarrow \frac{5g}{4} = 30$$

$$\rightarrow$$
 g = 24

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The number of tourists who visited Kasi = c + y + z + g

$$=3g+\frac{g}{4}+\frac{g}{4}+g=\frac{9g}{2}=108$$

Hence, option C is correct.





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