# DI Mixed Chart Questions for SBI PO Mains, IBPS PO Mains and RBI Grade B Exams.

DI Mixed Chart No. 74

Directions : Study the following pie and line chart carefully and answer the questions given beside.

Four friends, Priyanka, Pinki, Rinki, and Munni start travelling for a certain distance from the same point and at the same time. The following stacked column chart gives the information about the percentage of the total distance travelled by them in five different modes of travelling namely On foot, Bicycle, Bike, Car and Rickshaw. Each one travels a different distance in the same time.
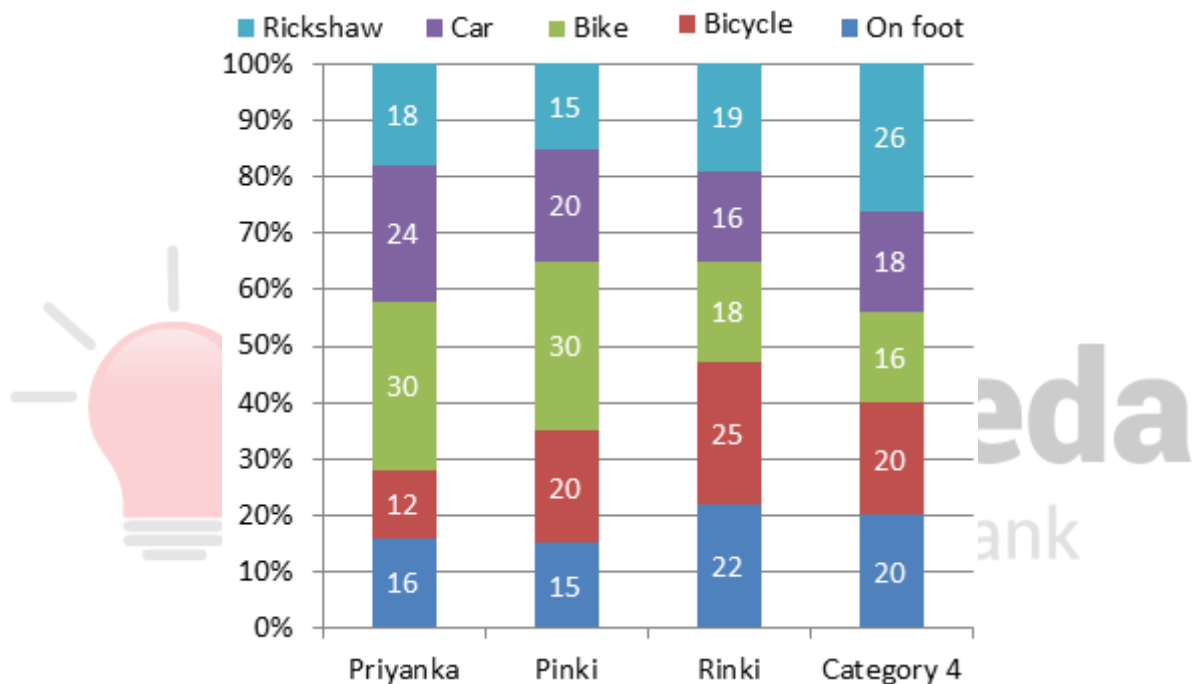
The following pie chart provides information about the distance (in km) travelled by each of them on foot as a percentage of the sum of the total distance travelled by them on foot.
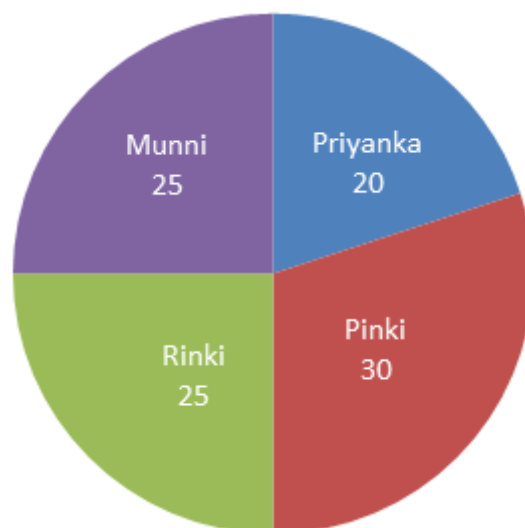
1. **For who among the following, the distance travelled by her was the least?**

A. Munni   B. Pinki   C. Priyanka   D. Rinki   E. Priyanka and Munni Both

2. **If the average speed of Priyanka is 45 km/hr and the distance travelled by her on foot is 36 km. Find the difference between the average speed of Priyanka and the average speed of Munni?**

A. 0 km/hr   B. 10 km/hr   C. 5 km/hr   D. 45 km/hr   E. 25 km/hr

3. **Suppose Pinki starts 1 hour later than all other three start their journey but Priyanka and Pinki complete their respective distance at the same time. The total distance travelled by all of them on foot is 250 km. Find the respective ratio of the average speed of Priyanka and Pinki in this case?**

A. 5 : 8   B. 5 : 6   C. 6 : 7   D. 6 : 5   E. Can't be determined

4. **If the total distance travelled by all of them on foot is 300 km. Find the sum of the total distance travelled by all of them by car and by rickshaw? (approx)**

A. 651 km   B. 541 km   C. 648 km   D. 698 km   E. Can't be determined

5. **Each of the two girls Rinki and Munni starts their journey at 10: 30 but Munni take 1-hour rest in the middle of the journey but each of them reaches their respective distance at 00:30. Find the ratio of the respective average speed of Rinki and Munni if the average of the total distance travelled by Priyanka and Pinki together on foot is 125 km.**

A. 10 : 11   B. 11 : 13   C. 14 : 11   D. 5 : 7   E. 11 : 10

Correct Answers:

1	2	3	4	5
D	A	E	A	A

Explanations :

1. Let the total distance travelled by them on foot = 100y km

The total distance travelled by Priyanka on foot = 20% of 100y

Now, she travelled 16% distance on foot of what she travelled, so

20% of 100y = 16% of total distance she travelled

The total distance she (Priyanka) travelled

$= \dfrac{20y}{0.16}$ = 125y km

Similarly, the total distance travelled by Pinki = 200y km
The total distance Rinki travelled = 114y km
The total distance Munni travelled = 125y km
So, Rinki travelled the longest distance.

Hence, option D is correct.

2. The distance travelled by Priyanka on foot = 16% of the total distance = 36 km
The total distance travelled by Priyanka = 225 km

Average speed = 45 km/hr,
Time she took = $\dfrac{225}{45}$ = 5 hours ---------(i)

From the pie chart, 36 km = 20% of the total distance travelled by all of them together on foot.

The total distance travelled by Munni on foot = 25% of the total distance travelled by all of them on foot

Since, 20% = 36 km therefore,

25% = $\dfrac{36 \times 25}{20}$ = 45 km

From the stacked chart, 45 km = 20% of the total distance travelled by Munni

The total distance travelled by Munni
$\dfrac{45 \times 100}{20}$ = 225 km

In the question, it is given that each of them takes equal time, so from the equation (i) even Munni will take 5 hours.

Average speed of Munni = $\dfrac{225 \text{ km}}{5 \text{ h}}$ = 45 kmph

Difference = 45 kmph – 45 kmph = 0 km/hr
Hence, option A is correct.

3. Let the time taken by Pinki = T hours
Then according to the question, the time taken by Priyanka = T + 1 hours

Now, For Priyanka
20% of the total distance travelled by all of them on foot = 16% of the total distance travelled by Priyanka

20% of 250 = 16% of the total distance travelled by Priyanka
By solving, the total distance travelled by Priyanka = 312.5 km

Average speed of Priyanka = $\dfrac{312.5}{T + 1}$ kmph ------(i)

Similarly for Pinki,

30% of the total distance travelled by all of them on foot = 15% of the total distance travelled by Pinki

30% of 250 = 15% of the total distance travelled by Pinki By solving, the total distance travelled by Pinki = 500 km

Average speed = 500 km/T ------(ii)
We cannot find any ratio from the two results (i) and (ii).
Hence, option E is correct.

4. The total distance travelled by all of them on foot is 300 km.

For Priyanka,
The total distance travelled by Priyanka on foot = 20% of the total distance travelled by all of them on foot = 20% of 300 = 60 km

16% of the total distance travelled by Priyanka = 60 km

The total distance travelled by Priyanka by car and by rickshaw = (18 + 24)% of the total distance
16% = 60 so the value of 42%
$\dfrac{60 \times 42}{16}$ = 157.5 km

Similarly, For Pinki,
30% of 300 = 15% of the total distance travelled by her
15% = 90
So, (20 + 15)% = 35%
$\dfrac{90 \times 35}{15}$ = 210 km

Similarly, for Rinki = 119.32 km
For Munni = 165 km
Sum = 651.82 km
Hence, option A is correct.

5. The sum of the total distance travelled by Priyanka and Pinki together on foot is 125 × 2 = 250 km

From the pie chart, the sum of the total distance travelled by Priyanka and Pinki together on foot = (20 + 30) % of the total distance travelled by all of them on foot

50% of the total distance travelled by all of them on foot = 250 km

The total distance travelled by all of them on foot

$$= \frac{250 \times 100}{50} = 500 \text{ km}$$

The total distance travelled by Rinki on foot = 25% of 500 = 125 km = 22% of the total distance travelled by her 22% of the total distance = 125 km

Total distance Rinki travelled $= \dfrac{125 \times 100}{22}$

Total time taken by her = 14 hrs

Speed $= \dfrac{(125 \times 100)}{(14 \times 22)}$ kmph

the total distance travelled by Munni on foot = 25% of 500 = 125 km = 20% of the total distance travelled by her 20% of the total distance = 125 km

Total distance $= \dfrac{125 \times 100}{20}$ km

Total time taken by Munni = 14 hour

Speed $= \dfrac{125 \times 100}{14 \times 20}$ kmph

Ratio $= \dfrac{125 \times 100}{14 \times 22} : \dfrac{125 \times 100}{14 \times 22} = 10 : 11$

Hence, option A is correct.