

Suzhou Tourist Attractions Problem

Suzhou, often referred to as the "Venice of the East," is renowned for its classical gardens and traditional water towns. A survey was conducted among tourists visiting Suzhou to understand their preferences. The survey focused on two popular attractions: exploring the "Classical Gardens" and visiting the "Traditional Water Towns."



From the survey:

1. 70% of the tourists explored the Classical Gardens.
2. 50% visited the Traditional Water Towns.
3. 30% did both activities.

Questions:

1. Draw a Venn diagram to represent the tourists' attraction choices.
2. What percentage of tourists explored only the Classical Gardens and did not visit the Traditional Water Towns?
3. What percentage of tourists visited only the Traditional Water Towns and did not explore the Classical Gardens?
4. Given that a tourist explored the Classical Gardens, what is the conditional probability they also visited the Traditional Water Towns?

Shanghai Tourist Activities Problem

Shanghai is a popular destination for tourists, offering a variety of activities. Three of the most popular activities are visiting the "Oriental Pearl Tower," taking a cruise on the "Huangpu River," and shopping on "Nanjing Road."



A survey of 200 tourists revealed the following:

1. 110 tourists visited the Oriental Pearl Tower.
2. 80 tourists took a cruise on the Huangpu River.
3. 95 tourists shopped on Nanjing Road.
4. 50 tourists visited both the Oriental Pearl Tower and took a cruise on the Huangpu River.
5. 40 tourists visited both the Oriental Pearl Tower and shopped on Nanjing Road.
6. 35 tourists took a cruise on the Huangpu River and shopped on Nanjing Road.
7. 20 tourists did all three activities.

Questions:

1. Draw a Venn diagram to represent the tourists' activity choices.
2. How many tourists visited only the Oriental Pearl Tower?
3. How many tourists took only a cruise on the Huangpu River?
4. How many tourists shopped only on Nanjing Road?
5. How many tourists participated in exactly two of the activities?