

Suzhou Silk Festival Visitors

The Suzhou Silk Festival is held every year, and each year the number of visitors increases in an arithmetic sequence. In the first year of the festival, there were 5,000 visitors. By the third year, the number of visitors had increased to 7,000.



- a) Determine the common difference of the arithmetic sequence representing the annual increase in visitors.
- b) Predict the number of visitors in the 10th year of the festival.
- c) How many total visitors will have attended the festival from the 1st year to the 10th year inclusive?

Pinjiang Road

Every year, the local government of Suzhou invests in the preservation and promotion of Pingjiang Road to attract more tourists. As a result, the number of tourists visiting Pingjiang Road has been increasing steadily. In the first year of their promotional campaign, 10,000 tourists visited Pingjiang Road. The number of tourists increased by a fixed amount each year, and by the fifth year, there were 18,000 tourists.



- Determine the common difference of the arithmetic sequence representing the annual increase in tourists.
- Predict the number of tourists visiting Pingjiang Road in the 15th year of the promotional campaign.
- Calculate the total number of tourists who will have visited Pingjiang Road from the 1st year to the 15th year inclusive.