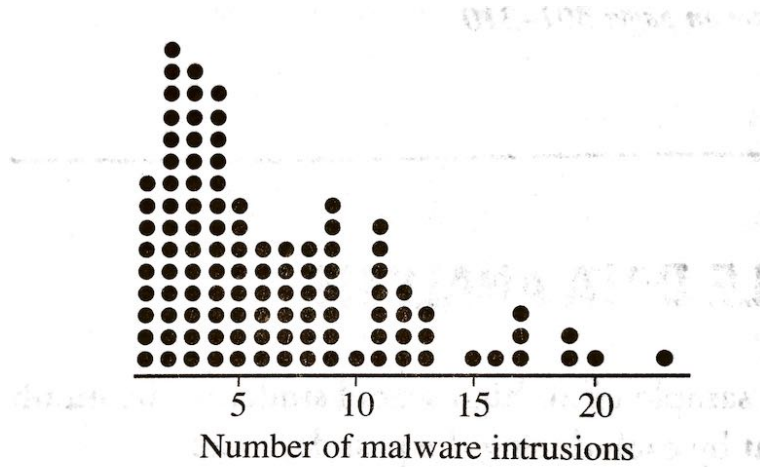# PRACTICE XII
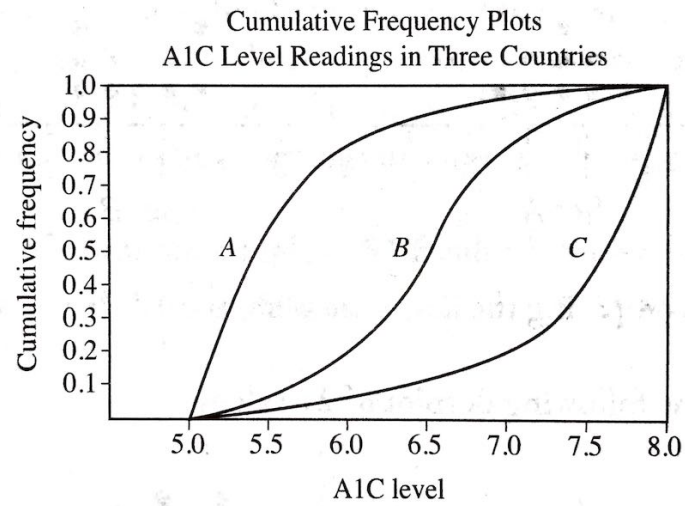
1. A bank of cybersecurity engineer notes the number of malware intrusions intercepted each hour during a random sample of 109 hour-long periods.

Number of malware intrusions

(a) Describe the distribution

(b) Is the quotient, $\dfrac{\text{mean intrusions}}{\text{median intrusions}}$. greater than 1, less than 1, or approximately 1? Explain.

2. The A1C test is used to diagnose diabetes. Cumulative graphs of A1C level readings in the populations of three countries (A, B, and C) are given below.

Cumulative Frequency Plots
A1C Level Readings in Three Countries

(a) Write a few sentences comparing the distributions of A1C level readings in the three countries.