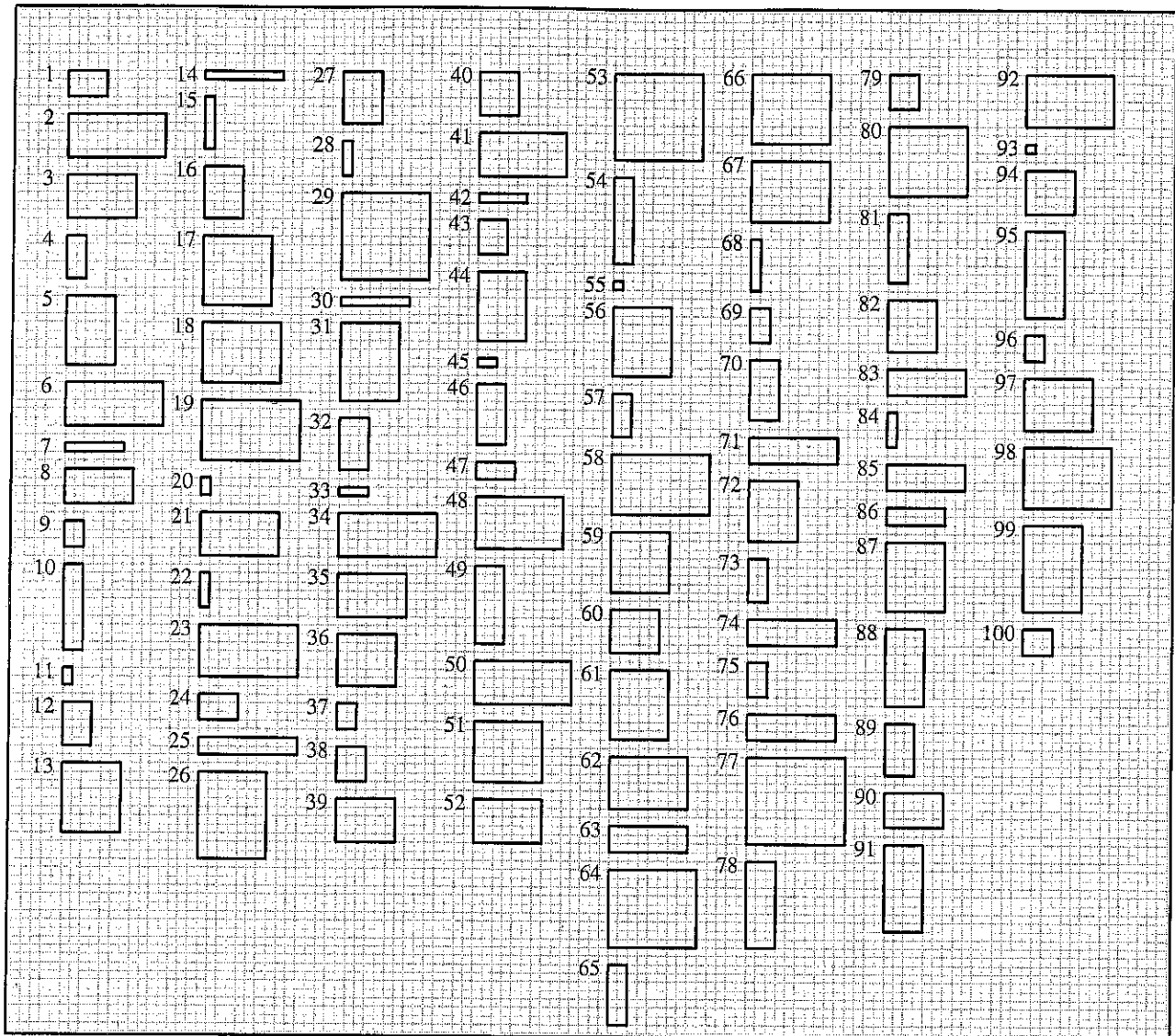




FIGURE 2.7
Population of 100 rectangles



- a Select a purposive sample of 10 rectangles that you think will be representative of the population of 100 rectangles. Record the area (number of small squares) for each rectangle in your sample. Use your sample to estimate the total area. How did you choose the rectangles for your sample?
- b Find the sample variance for your purposive sample of 10 rectangles from part (a), and use (2.22) to form an interval estimate for the total area t .
- c Now take an SRS of 10 rectangles. Use your SRS to estimate the total area of all 100 rectangles, and find a 95% CI for the total area.