App 16.1 You survey households in your area to find the average rent they are paying. find the standard deviations from the following data.
₱1550, 1700, 900, 850, 1000, 950

Sol:

$$S.D = \frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}$$

$$\bar{x} = \frac{1550+1700+900+850+1000+950}{6}$$

$$= 1158$$

$$S.D = \frac{(1550-1158)^2 + (1700-1158)^2 + (900-1158)^2 + (850-1158)^2 + (1000-1158)^2 + (950-1158)^2}{5}$$

$$= \frac{153664+293764+66564+94864+24964+43264}{5}$$

$$SD = 135416.8.$$