1. Consider the sample below:
   \[
   2 \ 0 \ 5 \ 5 \ 4 \ 10 \ 1 \ 5
   \]

   (a) (1 point) Find the sample size.

   (b) (1 point) Find the sample mode.

   (c) (2 points) Find \( \sum x \).

   (d) (2 points) Find \( \sum x^2 \).

   (e) (2 points) Find \( \bar{x} \). Round your answer to one decimal place.

   (f) (2 points) Find \( s^2 \). Simplify your answer to a reduced fraction.

   (g) (2 points) Find \( s \). Round your answer to one decimal place.
2. Consider the sample below:

20 10 15 8 14 15 18 5 12 20 10 16

(a) (2 points) Find the sample median.

(b) (2 points) Find $\sum x$.

(c) (2 points) Find $\sum x^2$.

(d) (2 points) Find $\bar{x}$. Round your answer to one decimal place.

(e) (2 points) Find $s^2$. Simplify your answer to a reduced fraction.

(f) (2 points) Find $s$. Round your answer to one decimal place.

(g) (2 points) Estimate $s$ by using the range rule–of–thumb.
Given: \( n = 20, \sum x = 1570, \sum x^2 = 125696, \text{ minimum} = 60, \text{ and maximum} = 100 \)

(a) (2 points) Estimate \( s \) by using the range rule–of–thumb.

(b) (1 point) Find the sample midrange.

(c) (2 points) Find \( \bar{x} \). Round your answer to a whole number.

(d) (2 points) Find \( s^2 \).

(e) (2 points) Find \( s \). Round your answer to a whole number.

(f) (2 points) Using the rounded answers, find the 68\% range.

(g) (2 points) Using the rounded answers, find the 95\% range.
4. The following calculator displays present the basic computational statistics on a randomly selected sample.

(a) (2 points) Find the range and the midrange.

(b) (2 points) Find the usual range of the sample after rounding the sample mean and standard deviation to a whole number.

(c) (3 points) Draw its box plot and clearly label it.

(d) (1 point) Find its IQR.

(e) (3 points) Find the upper and lower fence of the sample.