The rainfall each month in Miami, Florida is shown in the following table. Find A. the mean monthly rainfall, B. the median monthly rainfall. C. the standard deviation D. the variance and the E. the range.

<table>
<thead>
<tr>
<th>Mon</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.0</td>
<td>1.8</td>
<td>2.5</td>
<td>3.7</td>
<td>6.8</td>
<td>7.5</td>
<td>6.5</td>
<td>7.1</td>
<td>9.7</td>
<td>8.0</td>
<td>2.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Enter data into L1 then

STAT > CALC 1: 1-Var Stats L1

(a) Mean
\[
\bar{x} = \frac{\sum x}{n} = \frac{60}{12} = 5
\]

(b) Median (sorted list)
middle value if n odd
mean of middle two if n even

1.8 1.8 2.0 2.5 2.6 3.7 6.5 6.8 7.1 7.5 8.0 9.7
(3.7+6.5)/2 = 5.1

(c) Standard Deviation
\[
S = \sqrt{\frac{n\sum x^2 - (\sum x)^2}{n(n-1)}} = \sqrt{\frac{(12)(390.42) - (60)^2}{12(11)}} \approx 2.867
\]

(d) Variance

\[
S^2 = (2.867054237)^2 \approx 8.22
\]

VARS 5:Statistics 3: Sx Sx^2

(e) Range

\[
\text{RANGE} = \text{MAX} - \text{MIN} = 9.7 - 1.8 = 7.9
\]

STUDY: Chapter 2: Section 2.4, 2.5
- Descriptive Statistics