5.2 – Frequency tables, histograms and frequency polygons

Frequency distribution:

<table>
<thead>
<tr>
<th>Width</th>
<th># of intervals</th>
</tr>
</thead>
</table>

**Note:**

Histogram:

Frequency Polygon:

**Note:**

Graphing by hand:

Data: 78, 70, 83, 79, 74, 85, 82, 74, 63, 75, 80, 69, 71, 80, 77, 81, 81, 65, 60, 66, 76

a) Range: ____________  b) width: ____________  Interval  Frequency
5.2 – Frequency tables, histograms and frequency polygons

Using Excel Online
Go to riverside website, click on Office 365 (top right) and sign in (regular ID and password).

The following functions in excel will be useful in graphing histograms and polygons

=SUM(____:___)  =COUNT(____:___)   =MIN(____:___)  =MAX(____:___)   =AVERAGE(____:___)
=STDEV.P(____:___)

You can sort a data set by highlighting the column and clicking on SORT (top right). This function is useful when constructing a frequency distribution table:

1. In Excel Online, you have to create a column for the intervals (on the left side) and a column for the frequency (on the right)
2. To create a histogram, highlight both columns and click on “INSERT” then “COLUMN”
3. To create a frequency polygon, highlight both columns and click on “INSERT” then “LINE”
4. Be sure to add a title for the graph and both axes. This can be done under the “CHART” options when the graph is constructed.

With the data set above, use Excel Online to find/create:

• Average
• Min/Max
• Range
• Frequency distribution table
• Histogram
• Frequency polygon

Do the same with the following data set:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>120</td>
<td>50</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>80</td>
<td>60</td>
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<td>200</td>
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