**In – class quiz (if you like) Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Listed below are recorded speeds (in miles per hour) of some randomly selected cars traveling on a 65 mile per hour section of Highway 405 in Los Angeles (data from Sigalert: <http://www.sigalert.com/Map.asp#lat=44.89188&lon=-121.4819&z=0> ).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **68** | **68** | **72** | **73** | **74** | **73** | **72** | **68** | **65** | **65** | **73** | **59** | **75** | **68** |
| **65** | **73** | **66** | **71** | **65** | **68** | **74** | **66** | **71** | **70** | **56** | **66** | **75** | **75** |
|  | **72** | **73** | **75** | **86** | **62** | **60** | **61** | **58** | **60** | **73** | **58** | **75** |

Start by getting these data into your Excel calculator. Mess with the histogram options until you get one you like. Then,

1. (**3** **points**) Identify outliers (if any) using the “outside of 2 standard deviations” rule.
2. (**2** **points**) Is it appropriate to use the “2 standard deviations” rule on this data? Why or why not?
3. (**3** **points**) Identify outliers (if any) using the “IQR” rule.
4. (**2 points**) What do you think – are these cars typically obeying the speed limit? Why or why not?