A class has been divided into groups of 5 students. Each group member has completed an individual 20-point quiz. Here are the scores on the quiz, by group:

 

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Group | 1 | 2 | 3 | 4 | 5 | 6 |
| $$\overbar{x}$$ |  |  |  |  |  |  |
| Range |  |  |  |  |  |  |
| IQR |  |  |  |  |  |  |
| sx |  |  |  |  |  |  |

Let’s calculate the standard deviation of **group 5** together by hand:

$$s(x)= \sqrt{VAR\left(x\right)} and VAR(x)=\frac{\sum\_{}^{}(x-\overbar{x})^{2}}{n-1}$$

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| $$x$$ |  |  |  |  |  |
| $$x-\overbar{x}$$ |  |  |  |  |  |
| ($x-\overbar{x}$)2 |  |  |  |  |  |
| $$\sum\_{}^{}(x-\overbar{x})^{2}$$ |  |  |  |  |  |
| $$s^{2}=\frac{\sum\_{}^{}(x-\overbar{x})^{2}}{n-1}$$ |  |  |  |  |  |
| $$s=\sqrt{\frac{\sum\_{}^{}(x-\overbar{x})^{2}}{n-1}}$$ |  |  |  |  |  |

Using a separate piece of paper (or the back), calculate the other 5 standard deviations (**by hand**). I will show you how to check your work using the graphing calculator afterwards.