

**Math 221: Basic Statistics Exam #1 Solutions**  
Week #6

Now, for each version, the corresponding frequency table is listed below.

Class	Freq.	Rel.F.	
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(7) To find the **range**  $R$ , **variance**  $S^2$  and the **standard deviation**  $S$ , use the formulas

$$R = \text{Max} - \text{Min}, S^2 = \frac{x^2 - \frac{(\sum x)^2}{20}}{20 - 1}, \text{ and } S = \sqrt{S^2}.$$

For each version, this gives

$$R = 17 - 1 = 16$$