

9. Standard Deviation = $\sqrt{12}$

Average = 65

4.33 standard deviations to 80

There is a less than 1% (close to 0%) chance of a random classmate getting a score more than 80%

10. $56,000 - 50,000 = 6,000$

$\frac{6,000}{12,000} = .5$ standard deviations away.

There is a 30.85% probability that your neighborhood has an average income more than \$56,000.