Chapter 6 Homework

1.) Let's imagine there are 6 football matches scheduled to occur in June and July, 3 of these matches will be outdoor and 3 indoor. Lionel Messi has both 75% chance of scoring inside and a 60% chance of scoring outside in each match.

Assuming that the matches are independent of each other, what is the probability that he will score in 0, 1, 2, or 3 matches both indoor and outdoor? Be sure to summarize each like I did in the slides.

2.) Using the data below calculate the standard deviation. Once you've calculated the standard deviation, you need to determine the z-score for a student who scored 77 points on the test using the calculated standard deviation and mean score of the data set.

	Student	Grades
1	Student1	77
2	Student2	55
3	Student3	47
4	Student4	77
5	Student5	67
6	Student6	66
7	Student7	90
8	Student8	73
9	Student9	70
10	${\tt Student10}$	53