Lesson 1: Probability; Discrete Random Variables

Homework

Solutions

Please note that the steps show rounded numbers, but that the final answers to the problems are calculated without rounding.

Problem	Part	Solution
1	-	No probability can be greater than 1 or less than 0
		The probilities of all possible events must add up to exactly 1
		The probability of an event not happening is equal to 1 minus the probability that it does happen.
2	-	38.3%
		The fact that all of the probabilities had to add up to 1 and that the chance of something happening
3	-	15.8%
4	-	78.1%
		The third rule (the chance of something happening is equal to 1 minus the chance that it does not ha
5	-	81.4%
6	-	It is not possible to answer this question using the data given. There may or may not
		be students from Texas, but we can't tell how many just from this data.
7	-	0.14
8	-	0.46
9	-	0
10	-	It is more likely to go up.