

Homework #2

Due 11:59pm (Section 2/Section 3) Feb. 8, 2019

You are encouraged to read Chapter 2 of your textbook to complete the homework.

Please follow the name convention to name your **folders and files**: `CC_<lastName>_HW<#>.pdf`. **Your HW will not be graded if you do not follow this name convention.** And electronically submit your HW to cv094021@gmail.com

Pages 61: 10, 14

Pages 68: 8

Pages 85-86: 10, 18

Please finish the following problem partially discussed in class today:

A chain of stores sells three different cell phones. Of its sales, 50% are brand 1, 30% are brand 2, 20% are brand 3. Each manufacturer offers a 1-year warranty on parts and labor. It is known that 25% of brand 1's cell phones require warranty repair work, whereas the corresponding percentages for brands 2 and 3 are 20% and 10%, respectively.

1. What is the probability that a randomly selected purchaser has brought Brand 1's cell phones that will need repair under warranty?
2. What is the probability that a randomly selected purchaser that will need repair under warranty
3. If a customer returns to the store with a cell phone that needs warranty repair work, what is the probability that it is a brand 1 cell phones? A brand 2 cell phones? A brand 3 cell phones?