

Name: _____ Math 130 Day 12 In Class Worksheet

Date: _____ The Probability Distributions of \bar{x} and \hat{p}

1. The weights of all bags of Flaming Hot Cheetos chips have a mean of 3.50 ounces and a standard deviation of 0.10 ounces. If 40 bags of Flaming Hot Cheetos are randomly selected, what is the probability that the average weight of these bags will be more than 3.53 ounces?

2. A bag of Flaming Hot Cheetos is considered defective if it contains a regular Cheetos chip. It has been determined that 9% of all bags of Flaming Hot Cheetos are defective. If you buy 180 bags of Flaming Hot Cheetos, what is the probability that between 6% and 15% of the bags will be defective?