Name _____   Date _____

Probability Distribution Based on Empirical Probabilities - Guided Lesson

Complete the following problems:

1) Last month, 275 of my 350 customers purchased one or more cell phones. Thus, the probability that a randomly selected customer purchased a cell phone is 275/350 = 0.78. Is this estimated probability or empirical probability?

2) John dealt a hand of six cards from a standard deck of playing cards. The number of possible hands is 20,358,520. The number of possible hands consisting entirely of red cards (diamonds and hearts) is 230230, and the number of possible hands consisting entirely of diamonds is 1,716.

The probability of being dealt a hand that does not consist entirely of red cards is approximately:

3) If you are dealt a hand of six red cards from a standard deck of playing cards, the probability of having a hand consisting entirely of diamonds is approximately what?