P. 36, #1-2   Due Friday 9/27   /10pts

1. A bucket contains one green block, one red block, and two yellow blocks. You choose one block from the bucket.

   a. Find the theoretical probability that you will choose each color.

   $P(\text{green}) = \frac{1}{4}$ $P(\text{yellow}) =$ $P(\text{red}) =$

   b.   Find the sum of the probabilities in part (a).

   c. What is the probability that you will *not* choose a red block? Explain how you found your answer.

   d. What is the sum of the probability of choosing a red block and the probability of not choosing a red block?
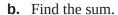
2. A bubble-gum machine contains 25 gumballs. There are 12 green, 6 purple, 2 orange, and 5 yellow gumballs.

a. Find each theoretical probability.

P(green) = P(purple) =

P(orange) = P(yellow) =

b. Find the sum.

P(green) + P(purple) + P(orange) + P(yellow) =

c. Write each of the probabilities in part (a) as a percent.

P(green) = P(purple) =

P(orange) = P(yellow) =

d. What is the sum of all the probabilities as a percent?

e. What do you think the sum of the probabilities for all the possible outcomes must be for any situation? Explain.