

Please complete the following problems for homework. Check Mrs. Kent's website for due dates.

Homework is an independent assignment and must be completed without assistance from other students. Students may not use unauthorized assisted devices on this assignment, including but not limited to Excel or other computer software/programs/devices. A handheld calculator to assist with arithmetic may be used. All problems must show all work on this paper (or an attached paper) to receive any credit since partial credit is only available on tests or quizzes.

1. Jason has a bag of marbles which has 4 red, 9 yellow, and 7 green marbles. He draws two marbles out of the bag, one at a time, WITHOUT replacement.
 - a. Draw a tree diagram to represent this situation. Include probability values for each branch and outcome. You can use R, Y, G to represent the colors.
 - b. Find the probability that he draws matching colored marbles.
 - c. Find the probability that he draws no green marbles.

2. Three cards are drawn at random from a standard deck of cards, one at a time, WITHOUT replacement. Find the probability that:
- All three cards drawn are red
 - The first card drawn is an 8, the second is a 5, and the third card drawn is another 8
 - The first card drawn is a spade, the second is a heart, and the third is another heart
 - All cards drawn are Queens
 - The first two cards drawn are face cards, and the third is not a face card