| MA 110-07 <br> §3.4-3.6 | QuiZ \#6 |  | same: $\quad$ |
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1. There are 6 red marbles and 8 green marbles in a jar. Three marbles are selected at random. What is the probablility that all three of the selected marbles are red? (7 points)
2. You and a one of your closest math friends make up a game. Your opponent pays you $\$ 1$ to play. Then the opponent rolls two dice. If the sum is 6 or less, you pay them nothing. If the sum is between 7 and 11 (inclusive), you pay them $\$ 1.25$; if 12 you pay them $\$ 5.00$. What are the expected winnings per game for your opponent? (7 points)
3. If two cards are dealt from a standard 52 -card deck of cards, find the probability that the second card is a heart given that the first card is a heart. (6 points)
