ORCA 2500, HW 4, written problems

1. Suppose you flip n fair coins What is the probability of getting exactly i heads, for each i. What is the probability of getting at least i heads for each i?

2. What is the probability of an odd sum when you roll three dice.

3. Suppose that each of 9 people are dealt 4 cards. What is the probability that one of the people has 2 or more kings. (I recently lost a poker hand where the only way I could have lost was if someone had 2 or more kings. I had been pretty sure I was going to win).

4. Which event is more likely:

   (a) drawing an ace and a king, when you draw 2 cards from a 52 card deck.

   (b) drawing an ace and a king, when you draw 2 cards from a 13 card deck consisting of only hearts.

   Please explain with calculations.