1. Suppose you flip 3 fair coins.
   (a) Write out all possible outcomes of flipping 3 coins.

   (b) What is the probability of getting 0 heads?

   (c) What is the probability of getting exactly 1 heads?

   (d) What is the probability of getting exactly 2 heads?

   (e) What is the probability of getting 3 heads?

   (f) Let $X$ = the number of heads you get after flipping 3 coins. Using the probabilities from the previous parts, calculate the expected value of $X$. SHOW YOUR WORK!