Problem: A poll in the USA Today showed that only 30% of adults did not watch at least one movie (at home) per week. Suppose a random sample of $n = 50$ adults are polled and asked if they had watched a movie at home this week. Let $x$ be the number of people who had watched a movie at home.

1. Can we consider this a binomial experiment? If so, what is $n$ and $p$?

2. What is the probability that exactly 35 people have watched a movie at home this week?

3. What is the probability that fewer than 30 individuals watched a movie at home this week?

4. Would it be unusual to find that exactly 30 people watched a movie at home? What about 25?