Problem 1. You take five preliminary exams, and you will pass each exam with probability 1/3, independently of other exams. What is the probability that you will pass two or more exams?

Problem 2. Toss a fair coin three times. Let $X$ be the number of Heads during the first two tosses. Let $Y$ be the number of Tails during the last two tosses. For example, if the sequence of tosses is TTH, then $X = 0$ and $Y = 1$. Are $X$ and $Y$ independent? Why or why not?