**6C Cumulative Probabilities on The Binomial Distribution**

1. The random variable . Find:
2. A spinner is designed so that the probability it lands on red is 0.3. Jane has 12 spins. Find the probability that Jane obtains:
3. No more than 2 reds
4. At least 5 reds
5. Jane decides to use this spinner for a class competition. She wants the probability of winning a prize to be less than 0.05. Each member of the class has 12 spins and the number of reds is recorded.

Find how many reds should be needed to win a prize