

An archer hits a bull's-eye with a probability of 0.09, and the results of different attempts can be taken to be independent of each other. If the archer shoots nine arrows, calculate the probability that:

- (a) Exactly two arrows score bull's-eyes.
- (b) At least two arrows score bull's-eyes.
- (c) What is the expected number of bull's-eyes scored?
- (d) What is the variance and standard deviation of bull's-eyes scored?