

Answer on Question #53331 – Math – Statistics and Probability

The probability of Sue winning a game of darts is 0.4. If she plays 100 games how many would you expect her to lose? (She can either win or lose. She can't draw)

Solution

At first, we must find the probability of Sue losing a game:

$$q = 1 - 0.4 = 0.6.$$

This problem deals with the binomial distribution and we search for the expectation.

If she plays 100 games , now we can find the number of games that Sue is expected to lose:

$$nq = 100 \cdot 0.6 = 60.$$

Answer: Sue is expected to lose 60 games.