In-Video Quiz Questions for
Unit 2: Part 4 – (3) Working with the Binomial Distribution

(02:59) – slide 4, after "so the probability of exactly 6 successes is going to be not far off from the mark."

1. **Same data / different question:** According to a 2014 Gallup poll, 56% of uninsured Americans who plan to get health insurance say they will do so through a government health insurance exchange.

What is the probability that in a random sample of 10 people exactly 2 plan to get health insurance through a government health insurance exchange? Choose the closest answer. (You can do the calculations by hand, use R, or use the applet at http://spark.rstudio.com/minebocek/dist_calc/ to answer this question.)

(a) 0.0198

(b) 0.0439

(c) 0.00373

(d) 0.0236

Answers:

1. a

Explanation: $n = 10, k = 2, p = 0.56$

$\binom{10}{2} 0.56^2 \, 0.44^8 \approx 0.0198$