Precalculus Journal S.CP.B.9: Binomial Probability www.jmap.org

NAME:

1. Explain what is meant by a binomial experiment and give an example.

2. Create a binomial experiment. Assign probabilities and determine the probability of one outcome in three trials.

3. Write a probability problem for which ${}_{6}C_{2}(0.2)^{4}(0.8)^{2}$ is the solution.

Answers may vary. Sample: A binomial experiment is an experiment with exactly two outcomes. For [1] example, tossing a coin has only two possible outcomes, heads or tails.

Answers may vary. Sample: Place 5 cards in an envelope. Three say "yes" and two say "no". A card is selected, noted, and put back. What is the probability that you will get "yes" three times? P(YYY) = 0.216

[2]

Answers may vary. Sample: Find the probability that it will rain during four of the next six days if the [3] probability of rain each day is 20%.