Klarke Math 8th Grade _____ _____

NAME PERIOD DATE

Problem 2.2

A

1. Suppose the probability of rain is 25%. What profit can the concession stand expect? Explain.
2. What is the probability of rain if the profit expected is $625? Explain your reasoning.

B

1. Write an equation you can use to predict the concession-stand profit P based on the probability of rain R.
2. Use your equation to predict profit when the probability of rain is 25%. Compare your answer with your result in Question A, part (1).

C

1. Write an equivalent expression for the profit in Question B. Explain why the two expressions are equivalent.
2. What probability of rain predicts a profit of $625? Compare your answer with your result in Question A, part (2).
3. Predict the profit when the probability of rain is 0%. Does your answer make sense? Explain.
4. Predict the profit when the probability of rain is 100%. Does your answer make sense?

D Do the equations in Questions B and C represent a linear or nonlinear function? Explain.