

Name _____

Date _____

The Expected Value of Random Variable - Matching Worksheet

Match the word problems to their answers. Write the letter of the answer that matches the problem.

_____ 1. An alphabet wheel has 26 equally likely spaced slots numbered A to Z. Rusty bets \$ 1 on one of the numbers and wins \$ 20. You earn \$20 if it lands on your letter, otherwise you lose your bet. The random variable X assigns \$20 to the wheel landing on letter chosen and -\$1 to having the wheel land on any other letter. What is expected value of alphabet on wheel? a. 2.5

_____ 2. An experiment consists of playing club cards from a deck of cards. The random variable X will be the card that turns up. What is the expected value of X? b. -0.19

_____ 3. An experiment consists of choosing 1 of 7 cookies in packet at random. Let the random variable X be the cookie that turns up. What is the expected value of X? c. 3.5

_____ 4. An experiment consists of choosing 1 of 6 candles in a box at random. Let the random variable X be the candle number that turns up. What is the expected value of X? d. 3.78

_____ 5. An experiment consists of randomly removing jacks from a standard deck of cards. The random variable X will be the card that turns up. What is the expected value of X? e. 4

