

Name _____

Date _____

The Expected Value of a Random Variable - Guided Lesson

Complete the following problems:

1) Annie is flipping a single coin with sides labeled 1 and 2. Let the random variable X be the number that flips up. What is the expected value of X ?



2) Five thousand tickets are sold at \$5 each for a cultural show lottery. Tickets are to be drawn at random and cash prizes are to be awarded as follows: 1 prize of \$500, 2 prizes of \$100, and 3 prizes of \$50. What is the expected value of this lottery if you buy 1 ticket?

3) An experiment consists of selecting 1 of 3 chocolates that are labeled 1, 2 and 3 from a pouch. Let the random variable X be the number that turns up. What is the expected value of X ?

