Name _____ Date _____

Calculating the Payoff of a Game of Chance - Guided Lesson

Complete the following problems:

1) Andrew wants to sell his car. He spends $300 to advertise the sale of the car. If the car sells in 2 months, he earns $800. Otherwise, he loses the listing. If there is a 50% chance that the car will sell in 2 months, what is the expected payoff?

2) 5 friends are playing Bingo. The game ticket cost is $2. The rule is that the person who matches five numbers from a total of 25 numbers wins $5. What is the expected payoff for each person?

3) At a fair, the gathering of people depends on the days. On the holiday the crowd grows to 15,000 people. On business days, 5,000 attend the fair. Over the next 10 days, 20% of days will be a holiday and 80% of the days will be business days. What is the expected number of people to attend per day (on average)?