Warm-Up

1. What is the difference between a discrete random variable and a continuous random variable?
2. **Continuous** probability distributions assign what probability to every individual outcome?
3. What does N (.72, .05) mean?
   1. Find P(p < 0.64) b. Find P(p > 0.80) c. Find P(p < 0.64 or p > 0.80)
4. Of the students that drive at Pendleland High School, 20% have received no parking tickets, 45% have received 1 ticket, and 23% has received 2 tickets. The rest of the students have received 3 tickets.
   1. Define X in terms of the problem and give the probability distribution of X.

* 1. What percent have received 3 tickets?
  2. What percent has at least 1 ticket?
  3. What percent has less than 1?
  4. Find and interpret the mean number of tickets?

* 1. Find and interpret the standard deviation for the number of tickets.

1. Parking for the year costs $25 at Pendleland High School and each parking ticket costs $10. Let Y = total cost paid at the end of the year. Write an equation for Y.
   1. Give the probability distribution of Y.

* 1. Find and interpret the mean price paid at the end of the year.

* 1. Find and interpret the standard deviation for the price at the end of the year.

Warm-Up

1. What is the difference between a discrete random variable and a continuous random variable?
2. **Continuous** probability distributions assign what probability to every individual outcome?
3. What does N (.72, .05) mean?
   1. Find P(p < 0.64) b. Find P(p > 0.80) c. Find P(p < 0.64 or p > 0.80)
4. Of the students that drive at Pendleland High School, 20% have received no parking tickets, 45% have received 1 ticket, and 23% has received 2 tickets. The rest of the students have received 3 tickets.
   1. Define X in terms of the problem and give the probability distribution of X.

* 1. What percent have received 3 tickets?
  2. What percent has at least 1 ticket?
  3. What percent has less than 1?
  4. Find and interpret the mean number of tickets?

* 1. Find and interpret the standard deviation for the number of tickets.

1. Parking for the year costs $25 at Pendleland High School and each parking ticket costs $10. Let Y = total cost paid at the end of the year. Write an equation for Y.
   1. Give the probability distribution of Y.
   2. Find and interpret the mean price paid at the end of the year.

* 1. Find and interpret the standard deviation for the price at the end of the year.