Academic Skills Center

Statistics Review #1

1.Determine Whether the Following Data is continuous or discrete

1. The number of people in a class
2. Temperature

2. Consider the Following Collection of Sample Data ? 35,35,31,27,35,28,28,34,99,31,27,35,55

|  |  |  |
| --- | --- | --- |
| Cut Point | Frequency | Relative Frequency |
| 0-10 |  |  |
| 10-20 |  |  |
| 20-30 |  |  |
| 30-40 |  |  |
| 40-50 |  |  |
| 50-60 |  |  |
| 60-70 |  |  |
| 70-80 |  |  |
| 80-90 |  |  |
| 99-100 |  |  |

B) Make a relative Frequency Histogram for the data in part a, what is the best classification of this distribution?

C) Find the Mean, Mode, and Median of the data

D)Find the standard Deviation of data, and interpret

E) Find the Z score of the data value 35, interpret in words

F) find 5-number summary

G) find interquartile Range

3. Population has a mean of 205 and SD of 45. Chebyshev’s rule states at least 89% of the numbers lie between \_\_\_\_ and \_\_\_\_. (Numbers not generic form)

4. Data Value from a sample with mean 52 and standard deviation 5 and Z-score of 20. What is the data value?

5. A)Two coins are tossed, find the probability that two heads are obtained. **Note:** Each coin has two possible outcomes H (heads) and T (Tails).

B )A Die is rolled, and a coin is tossed, find the probability that the die shows an odd number and the coin shows a head?

C) A jar contains 3 red marbles, 7 green marbles and 10 white marbles. If a marble is drawn from the jar at random, what is the probability that this marble is white?

6.

Draw 1 Card from a 52 Card Deck. Let Q= Queen and N= Card Drawn is a number card (2-10) determine

1. P(N)
2. P(Q’)
3. P(Q u N)
4. P(Q n N’)
5. Are N & Q mutually Exclusive?