Statistics 2.4 Practice #1 Name: _____

1. The mean life of a sea turtle is 84 years with a standard deviation of 5 years. The life span of a sea turtle is a symmetrical distribution.

A) Would you use the Empirical Rule or Chebychev's Theorem for this situation?

B) Create the SD number line, going out to 3 SD in each direction.

C) What percent of sea turtles will live from 79 to 84 years?

D) What percent of sea turtles will live longer than 89 years?

E) If a research group tags 150 turtles in an area, about how many of them would we expect to live from 74 to 99 years old?

2. Test scores on a recent stats exam were skewed left with a mean of 76 and a standard deviation of 8.

A) Would you use the Empirical Rule or Chebychev's Theorem for this situation?

B) Create the SD number line, going out to 3 SD in each direction.

C) What percent of the test scores are from 60 to 92?

D) What percent of the test scores are from 52 to 100?

E) Can you estimate the percent of scores from 76 to 84? Why or why not?

Statistics 2.4 Practice #2 Name: _____

1. Test scores on a recent stats exam were skewed left with a mean of 82 and a standard deviation of 6.

A) Would you use the Empirical Rule or Chebychev's Theorem for this situation?

B) Create the SD number line, going out to 3 SD in each direction.

C) What percent of the test scores are from 64 to 100?

D) What percent of the test scores are from 70 to 94?

E) Can you estimate the percent of scores above 88? Why or why not?

2. The mean life of a pygmy bat is 8.5 years with a standard deviation of 1.2 years. The life span of these bats is found to have a symmetrical distribution.

A) Would you use the Empirical Rule or Chebychev's Theorem for this situation?

B) Create the SD number line, going out to 3 SD in each direction.

C) What percent of pygmy bats will live less than 4.9 years?

D) What percent of pygmy bats will live from 7.3 to 12.1 years?

E) About 95% of pygmy bats will live about how long?

F) If there are 80 bats in your attic, and you can't afford to move and don't want to go to prison for burning your house down, about how many of them could you expect to live more than 9.7 years?