

Elementary Statistics

Name: _____

Optional Study Guide 2

Class: _____

Due Date: _____

Score: _____

Your work must be very similar to my notes, lectures, or videos.

Be Neat, Organized, and No Work \Leftrightarrow No Points

You must display full TI command to find these probabilities.

1. Consider a poisson probability distribution with $\mu = 4$, and x be the number of occurrences in the given interval,

(a) (3 points) Find $P(x = 2 \text{ or } x = 3)$

(a) _____

(b) (2 points) Find $P(x \leq 2)$

(b) _____

(c) (2 points) Find $P(x \geq 4)$

(c) _____

(d) (3 points) Find the 68% range.

(d) _____

2. A newspaper finds that the mean number of typographical errors per page is 6. Find the probability that

(a) (2 points) exactly four typographical errors will be found on a page.

(a) _____

(b) (2 points) at most five typographical errors will be found on a page.

(b) _____

(c) (3 points) at least two typographical errors will be found on a page.

(c) _____

3. An insurance salesperson sells an average of 1.6 policies per day. Find the probability that this salesperson sells

(a) (2 points) no insurance policy on a certain day.

(a) _____

(b) (3 points) fewer than 4 policies on a certain day.

(b) _____

(c) (3 points) more than 2 policies on a certain day.

(c) _____
