

Elementary Statistics

Name: \_\_\_\_\_

Study Guide 3

Class: \_\_\_\_\_

Due Date: \_\_\_\_\_

Score: \_\_\_\_\_

No Work  $\Leftrightarrow$  No Points

Use Pencil Only  $\Leftrightarrow$  Be Neat & Organized

1. Consider a sample with range of 48, find the class width

(a) (2 points) if we wish to have a frequency distribution table with 4 classes.

(a) \_\_\_\_\_

(b) (2 points) if we wish to have a frequency distribution table with 5 classes.

(b) \_\_\_\_\_

(c) (2 points) if we wish to have a frequency distribution table with 6 classes.

(c) \_\_\_\_\_

2. The incomplete frequency distribution table given below represents the score of an exam in a math class.

(a) (5 points) Complete the frequency distribution table below:

Class Limits	Class Boundaries	Class Midpoint	Class Frequency	Cumulative Frequency	Percentage Frequency
55 — 67			4		
68 — 80			9		
81 — 93			16		
94 — 106			11		

(b) (1 point) Find the number of classes in this frequency distribution table.

(b) \_\_\_\_\_

(c) (2 points) Find the class width for this frequency distribution table.

(c) \_\_\_\_\_

(d) (2 points) How many students took this exam?

(d) \_\_\_\_\_

(e) (2 points) what percentage of the scores are between 68 and 93, inclusive?

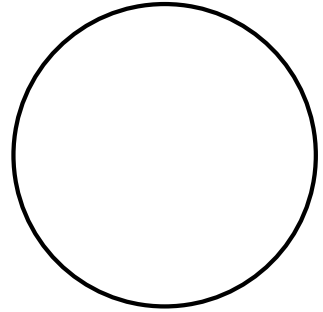
(e) \_\_\_\_\_

(f) (3 points) Draw the histogram. Clearly label and mark your graph.

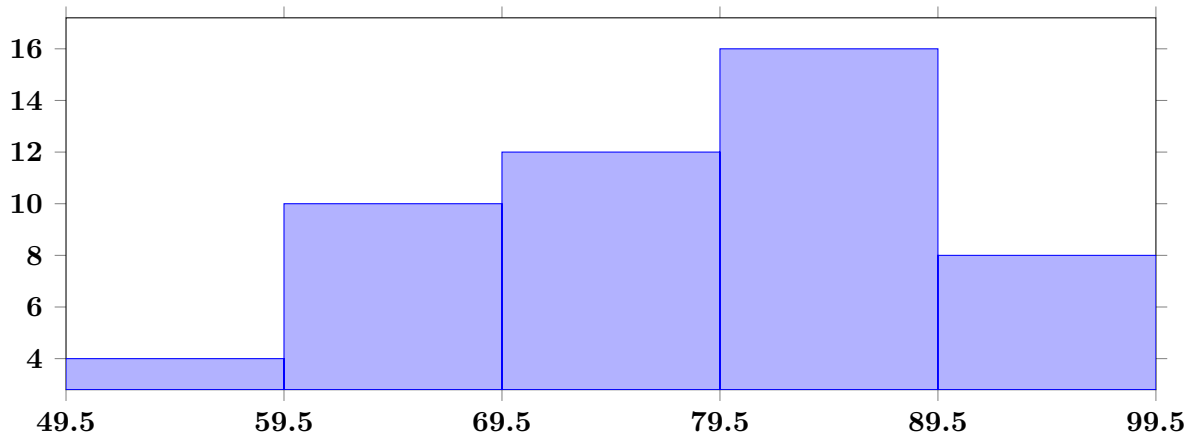
(g) (3 points) Draw the ogive. Clearly label and mark your graph.

(h) (3 points) Draw the frequency polygon. Clearly label and mark your graph.

(i) (3 points) Draw the pie chart. Clearly label and mark your graph.



3. Consider the graph below:



(a) (2 points) What is the class width for this graph?

(a) \_\_\_\_\_

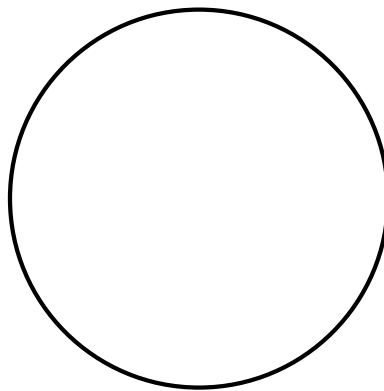
(b) (6 points) Complete the frequency distribution table below.

Class Limits	Class Boundaries	Class Midpoint	Class Frequency	Cumulative Frequency	Percentage Frequency

(c) (3 points) Draw the ogive. Clearly label and mark your graph.

(d) (3 points) Draw the frequency polygon. Clearly label and mark your graph.

(e) (3 points) Draw the pie chart. Clearly label and mark your graph.



(f) (3 points) What percentage of this data fall within 59.5 and 89.5 ? Round to the nearest whole percent.

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(f) \_\_\_\_\_