

Math 115 - Quiz 2

September 4, 2014

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) A frequency distribution is shown below.

Lengths (ft)	Frequency
4.5–8.4	2
8.5–12.4	7
12.5–16.4	5
16.5–20.4	2
20.5–24.4	1

- (a) What are the lower class limits?

 $4.5, 8.5, 12.5, 16.5, 20.5$

- (b) What is the class width?

$$8.5 - 4.5 = \boxed{4}$$

- (c) What are the class boundaries?

 $4.45, 8.45, 12.45, 16.45, 20.45, 24.45$

- (d) If the frequency distribution was changed to a relative frequency distribution, what relative frequency would be associated with the class 12.5–16.4?

$$2 + 7 + 5 + 2 + 1 = 17$$

$$\frac{5}{17} \approx 29.4\%$$

- (e) Sketch the histogram that corresponds to the frequency distribution.

