

Math 153 - Quiz 2

February 4, 2016

Name key

Score _____

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

1. (5 points) Dion buys and sells used video games. The frequency distribution shown below shows the amounts that Dion paid for used video games on one of the days last week.

Amount Paid (\$)	Frequency
3.00-5.39	7
5.40-7.79	8
7.80-10.19	5
10.20-12.59	5
12.60-14.99	2
15.00-17.39	1

- (a) What is the class width?

$$5.40 - 3.00 = 2.40$$

- (b) What are the class boundaries associated with the last class listed above?

$$14.995 \text{ AND } 17.395$$

- (c) What is the class midpoint of the first class?

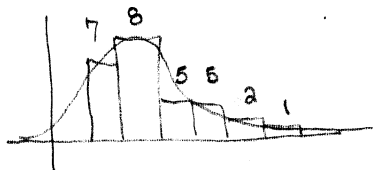
$$\frac{3.00 + 5.39}{2} = 4.195$$

- (d) If the frequency distribution was changed to a cumulative frequency distribution, what count would be associated with the class " ≤ 12.59 "?

$$7 + 8 + 5 + 5 = 25$$

- (e) Do the amounts appear to be normally distributed? Explain.

No, THE DISTRIBUTION LOOKS SKEWED RIGHT.



2. (5 points) Construct a frequency distribution with at least 5 classes.

~~17.9, 14.1, 12.1, 12.8, 13.4, 12.2, 19.4, 10.7, 13.7, 1.4, 13.7, 19.5~~

~~15.9, 19.0, 16.9, 5.8, 5.5, 7.2, 12.2, 14.4, 13.1, 11.2, 18.3, 29.9, 12.3~~

Min value is 1.4

Max value is 29.9

Width = 4.2

Lowest limit = 1

Amounts	TALLIES
1.0 - 5.1	I
5.2 - 9.3	III
9.4 - 13.5	
13.6 - 17.7	I
17.8 - 21.9	
22.0 - 26.1	
26.2 - 30.3	I

Amounts	Frequency
1.0 - 5.1	1
5.2 - 9.3	3
9.4 - 13.5	9
13.6 - 17.7	6
17.8 - 21.9	5
22.0 - 26.1	0
26.2 - 30.3	1