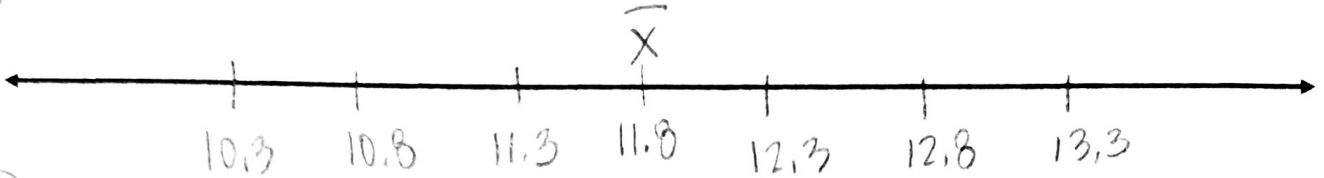


AFM
Unit 2 Statistics Quiz 2

Name Key 20

1. At a track meet, the race times for 35 runners for a 100 meter dash are normally distributed with a mean of 11.8 seconds and a standard deviation of 0.5 seconds.

3 a. Sketch a normal curve showing the race times one, two, and three standard deviations from the mean.



2 b. What percent of the entrants finished with a time less than 11.3 seconds? 16% 15.87%

2 c. What percent of the entrants finished with a time between 12.8 and 13.3 seconds? 2.5%

2 d. What percent of the entrants finished with a time greater than 12.1 seconds? 27.4%

2 e. What percent of the entrants finished with a time between 11 and 11.4 seconds? 15.7%

2 f. Find the symmetric interval about the mean which includes 90% of the data. 11-12.6 OR 10.9-12.7

2 g. How many runners have times within the interval 10 secs to 12 secs? 22.9/23 runners

2. Test scores were collected from a Math 1 class at CHS. Answer the questions using the following data:
72, 61, 75, 84, 62, 96, 88, 64, 74, 98

4 a. Find the 20th percentile. 64

b. Find the 40th percentile. 74

3. Determine whether the data in the table appears to be positively skewed, negatively skewed or normally distributed. The frequency table shows the number of hours worked per week by 71 students.

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Hours	Number of Students
0-5	6
6-10	15
11-15	21
16-20	18
21-25	7
26-30	3
31+	1

Positively skewed