Name_____Hour_____Date_____

Statistics Test Review – Algebra 2

Alan's scores on six weekly quizzes are : 6, 7, 9, 8, 8, 7. (Remember to re-order the data!)

1) What is the mean of the data? _____

2) What is the median of the data? _____

3) What is the mode of the data? _____

Use the following data for #4 & #5.

The following high temperatures were recorded during a cold spell in Cleveland:

29 26 17 12 25 17 23 18 13 25 20 27 22 26 30 12 27 17

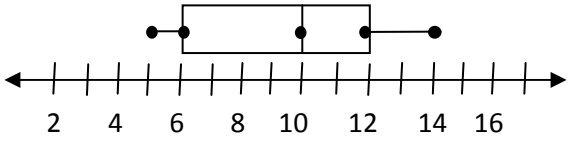
4) Make a Stem & Leaf plot of the temperatures.

Stem	Leaf

Key:

5) Make a line plot of the temperatures.

6) For the data shown in the box-and-whisker plot, identify these:



median(Q2):
lower quartile (Q1):
upper quartile (Q3):
lower extreme (LE):
upper extreme (UE):
interquartile range (IQR):
any outliers?

7) What % of the data falls between 6 & 12?____

8) What % of the data falls between 5 & 6?____

9) What % of the data falls between 6 & 14?_____

10) Put this data in order from least to greatest {679, 565, 805, 556, 718, 625, 553, 2064, 496, 1033} and find the following:

range:
median (Q2):
lower quartile (Q1):
upper quartile (Q3):
lower extreme (LE):
upper extreme (UE):
interquartile range (IQR):
any outliers?

calculate 1.5 x the IQR and add this number to Q3 to check for an outlier on the high end:

calculate 1.5 x the IQR and subtract this number from Q1 to check for an outlier on the low end:

Draw the box-and whisker plot:

←----------→

Use the following data for #11 & 12.

{8, 7, 7, 6, 4, 5 }

11) Find the mean (x bar).

12) Find the SD (σ).

Use the following data for #13 & 14.

{86, 71, 74, 65, 45}

13) Find the mean (x bar).

14) Find the SD (σ).

The diameters of metal fittings made by a machine are normally distributed. The mean diameter is 7.5 cm. and the standard deviation is 0.5 cm.

15) Draw a normal distribution graph. (label completely)

←----------→

16) What percentage of the fittings have diameters between 7.0 & 8.0 cm.?_____

17) What percentage of the fittings have diameters between 7.5 & 8.0 cm.?_____

18) What percentage of the fittings have diameters greater than 6.5 cm.?_____

19) Of 100 fittings, how many will have a diameter between 6.5 & 8.5?_____

20) Of 100 fittings, how many will have a diameter between 7.0 & 8.0?_____

The number of hours of television watched by 3000 families is normally distributed. The mean is 22 hours and the standard deviation is 5 hours.

21) Draw a normal distribution graph. (label completely)

←----------→

22) What percentage of the families watch more than 27 hours of television each week?_____

23) Of the 3000 families, how many watch television between 7 & 22 hours each week?_____

24) Of the 3000 families, how many watch at least 27 hours of television each week?_____