Measures of Central Tendency: Independent Practice

Name: _____   Date: _____

1) The following marks were recorded for a History exam:

37   68   72   73   73   75   77   81   82   82   83   84   97

Which measure of central tendency best represents the exam marks? Justify your choice.

2) Jeannine works as a real estate agent. Below is a price comparison list she has prepared for a client interested in selling their home.

	House 1	House 2	House 3
List Price ($)	324 500	379 000	299 900
Sale Price ($)	315 000	370 000	295 500

a) Determine the mean and median list and sale prices and the price ranges (Note: range = max -min). Use the table provided to organize your answers.

b) Which measure would you use for estimating what the client's house might sell for? Explain your choice.

	Mean	Median	Range (Max - Min)
List Price ($)			
Sale Price ($)			

Some Key Ideas

-The summary statistics--**mean, median and mode**--are referred to as **measures of central tendency** as they typically describe where the middle of the data lie.

-The **range** is a measure of spread that reports the difference between the maximum and minimum values of a data set.

-Together, you can use the measures of central tendency and the range to compare different data sets that have some comparable statistics.

    -For example, if two students, in two different classes have relatively similar grades, the classes can be compared to see which grade is 'better'.

-For some data sets, it is better to report the **median** as the measure that best represents the data. The median is resistant to large fluctuations in the values of a data set; the mean is not.

    -If a data set contains an **outlier** (or outliers), they can have a significant impact on the value of the mean, and therefore, the mean may not best represent the data.

    -An outlier is a data value that is distinctly different than all other values in a data set.