

Exercise III – Frequency distributions, central tendency, & variability

EDU 7211 – Dr. Mitchell

X	f
12	1
18	1
22	2
24	2
25	3
26	3
27	4
28	4
30	5

1. Compute the mean, median, and mode for the scores.
2. How would you describe the shape of this distribution and why?
3. If the score of 12 were actually supposed to be a score of 18, how would this change affect the three measures of central tendency? Why (note this question does not ask you to recompute the mean or median, but rather to answer the question on logical grounds.)
4. Under what circumstance(s) will the three measures of central tendency have the same value?
5. Suppose you knew that grades in Professor A's class were negatively skewed; grades in Professor B's class were positively skewed; and grades in Professor C's class were normally distributed. What does this say about the likelihood of earning a high grade in each class?
6. Compute the range, variance, and standard deviation of the following set of scores: (show your work even if you use a scientific calculator).

2,2,4,7,8,9,10,10,10,10