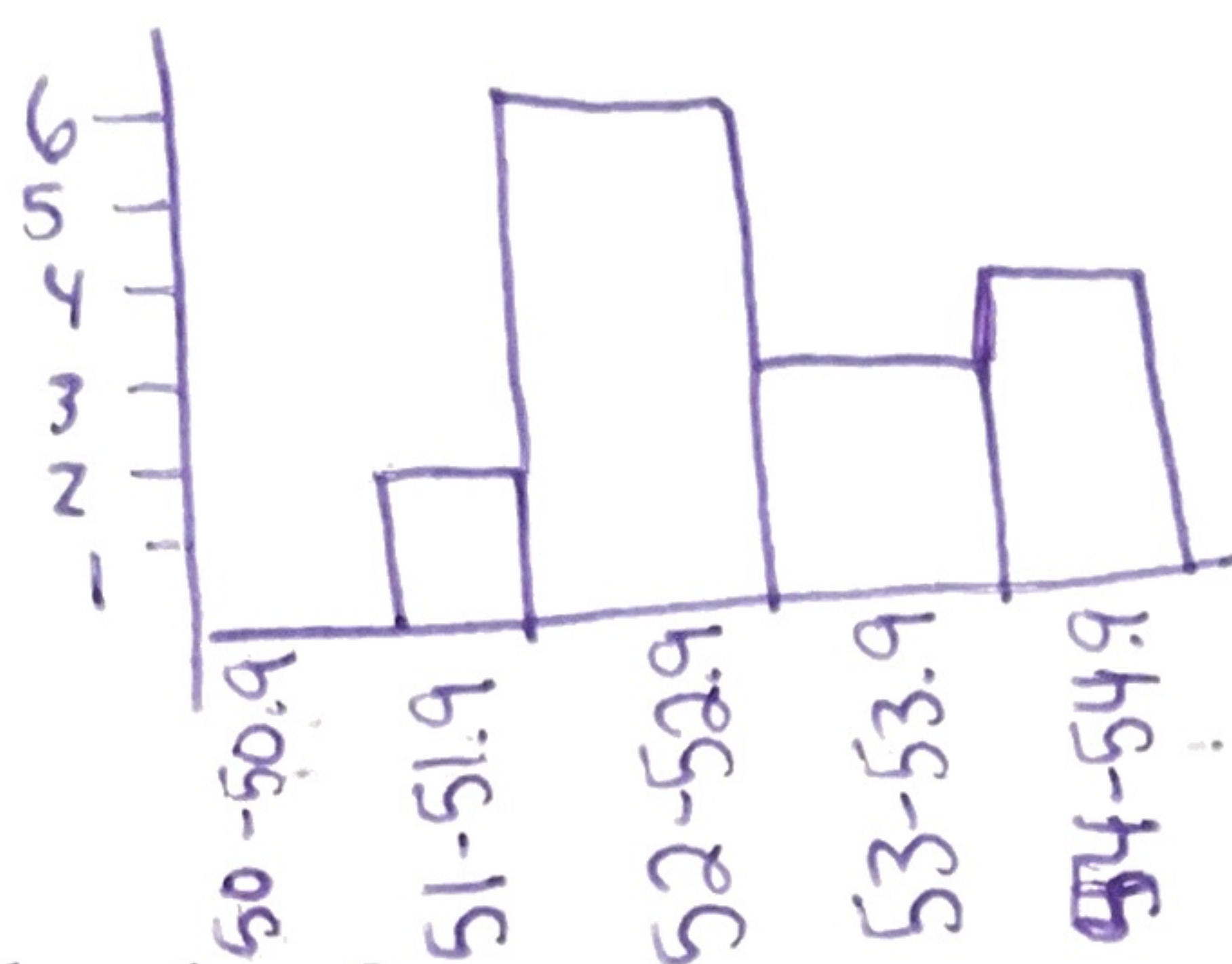


In the time trials for the 400 meter run of the state sectionals, the 15 runners recorded the times shown in the table below.

1) Turn the data into a histogram



400-Meter Run	
Time (sec)	Frequency
50.0-50.9	
51.0-51.9	II
52.0-52.9	
53.0-53.9	III
54.0-54.9	IIII

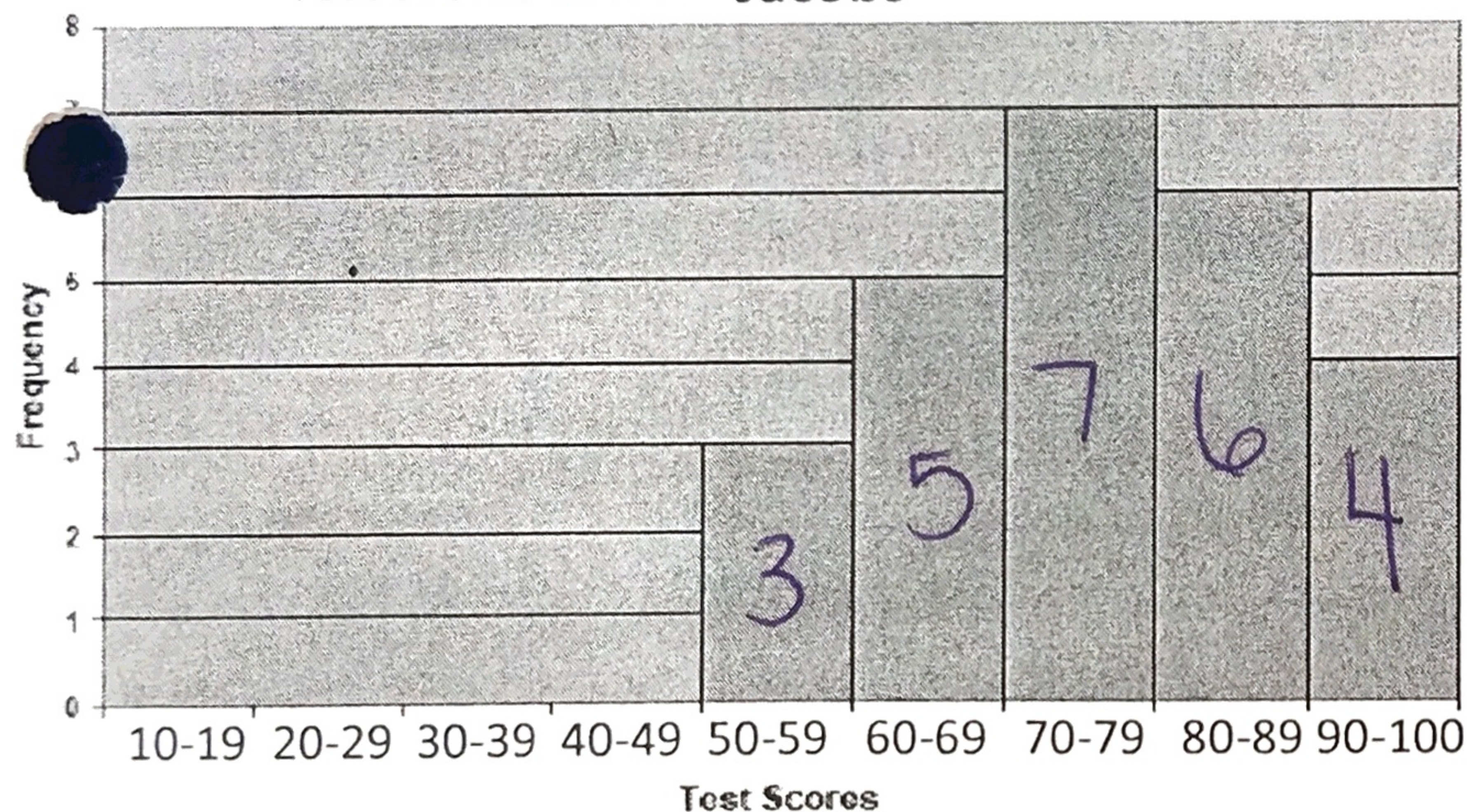
2) What is the shape of the data?

Skew right

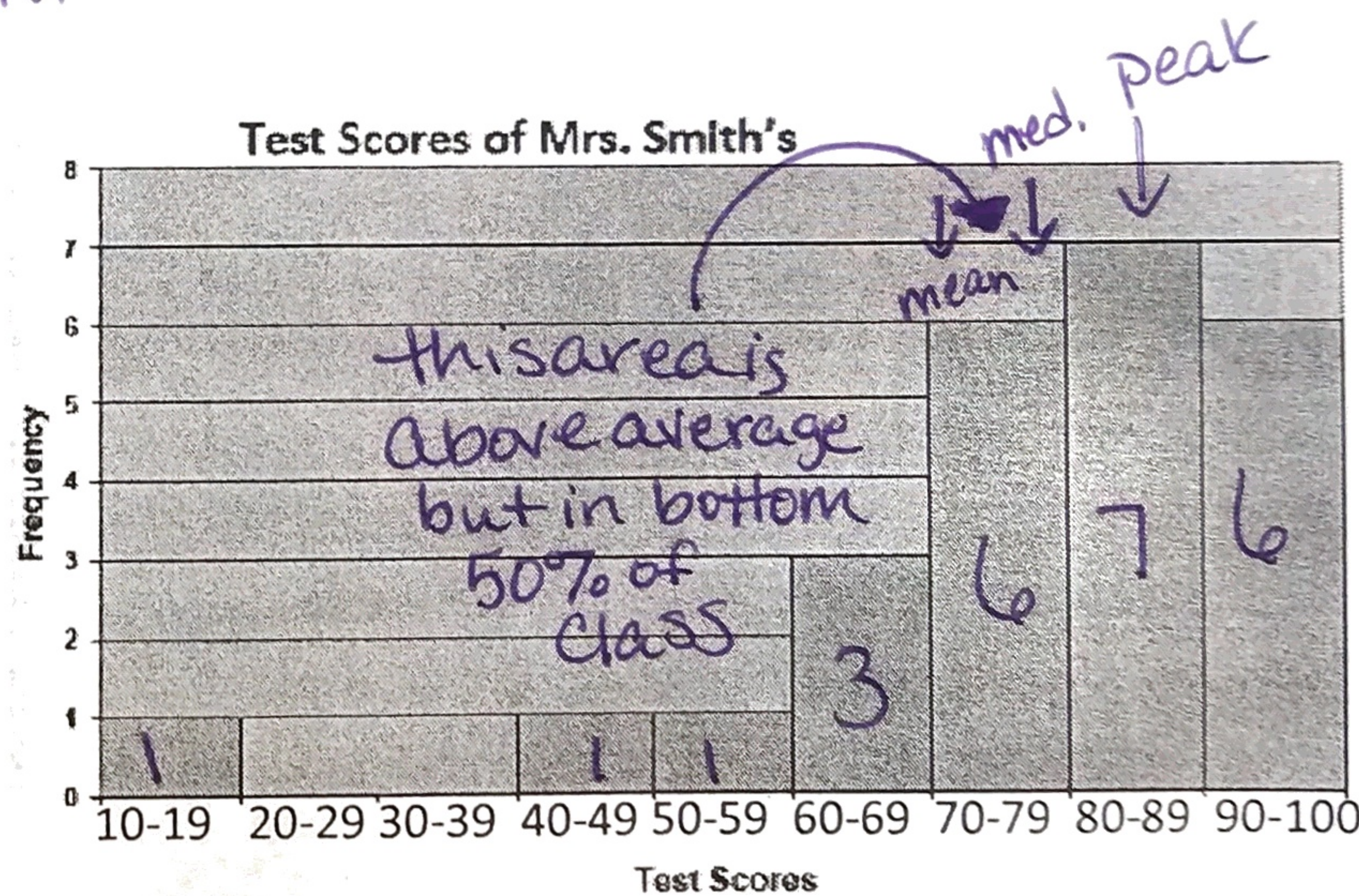
3) Without finding them, how would the mean and median be related? Explain.

the mean would be higher than the median
b/c it is skew right

Test Scores of Mrs. Jacobs'



Test Scores of Mrs. Smith's



4) How many students are in each class above?

Jacobs: 25

Smith: 25

5) In which class are the mean and median relatively the same? Explain how you can tell.

Mrs. Jacobs b/c it is symmetrical.

6) In which class could a student be above average but in the bottom 50% of the class? Explain how you can tell.

Mrs. Smith's b/c it is skew left

7) Mrs. Jacobs and Mrs. Smith both have approximately the same mean but Mrs. Smith has more A's and B's than Mrs. Jacobs. Would the principal be correct in assuming that Mrs. Smith is the better teacher? Explain.

Not necessarily. While it is true she has more A's & B's, she also has much lower F's (which is causing skewed data) so she may not be reaching all students.