

Name:

Date:

1. State whether the following distributions are skewed left, skewed right, approximately uniform, or approximately normal. Consider how the data would look in a histogram.

a) 3, 4, 4, 5, 7, 9, 9, 10, 12, 29

b) 14, 21, 25, 30, 36, 38, 44, 49, 53

2. In Professor Fay's Sociology class, the three papers are each worth 15% of the final grade, the midterm is worth 20%, and the final is worth 35%. Showing all work in a table, calculate Melina's grade if she scored 85, 91, and 98 on her papers, 90 on her midterm, and 95 on her final. Label all columns and values with appropriate symbols.

$f$	_____	_____
.15	_____	_____
_____	91	_____
_____	_____	14.7
_____	_____	_____
_____	_____	_____
$\Sigma f = 1.00$	$\Sigma fx =$ _____	

3. In a survey at Osorio High, 21 students said it takes them under 10 minutes to get to school, 16 students said it takes them 10 to 20 minutes to get to school, 7 students said it takes them 20 to 30 minutes to get to school, and 2 students said it takes them 30 to 60 minutes to get to school. Showing all work in a table, calculate an estimate of the standard deviation of the time it takes all students at McHatton High to get to school. Label all columns and values with appropriate symbols.

$f$	_____	_____	$x - \bar{x}$	_____	_____
21	5	_____	_____	_____	_____
_____	_____	240	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	45	_____	_____	_____	_____
$\Sigma f =$ _____	$\Sigma fx =$ _____	$\Sigma (x - \bar{x})^2 =$ _____	$\bar{x} =$ _____	$s =$ _____	
$\bar{x} \approx$ _____	$\div 46 =$ _____	$s = \sqrt{\text{_____} \div \text{_____}} \approx$ _____			

4. The following are the scores on a PreCalculus final: 104, 116, 124, 128, 132, 135, 137, 144, 148, 148, 152, 152, 152, 156, 156, 156, 156, 156, 160, 160, 160, 164, 164, 164, 168, 168, 172, 176, 176, 178, 180, 180, 184, 188, 188, 188, 192, 194, 196, 200, 204, 204, 204, 204, 204, 208, 212, 212, 212, 212, 216, 216, 216, 220, 228, 228, 236, and 236. Use a ruler to carefully make a neat, precise relative frequency histogram on the back.

- It is a relative frequency histogram, not a frequency histogram.
- The heights of the bars are calculated and drawn accurately.
- There is no space between the bars.
- The ranges are all the same size.
- There are between 5 and 15 bars with a height greater than zero.
- The x-axis label is correct and not plural.
- The y-axis label is correct and not plural.
- The title is clear and sufficiently thorough.
- The title and axis labels are neatly written, and the numbers are easy to read.
- The scales are marked in logical increments.
- All of the lines are drawn with a straightedge.
- The scales are measured with a ruler, not approximated.
- The histogram is neat overall.
- Everything is inked and/or in color.