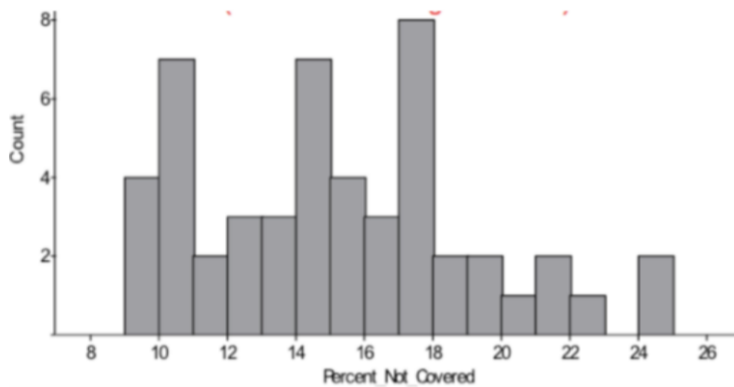


1.5: Bar Graphs and Histograms

Bar Graphs	<i>Used to</i>
Histograms	<i>Used to</i>

Histogram Example: People not covered by health insurance in 1998 (Given in percent)



1. Which bar would include a state that has 14% non coverage?

2. Estimate the mean.

3. How many states have $19\% \leq x < 20\%$ non coverage ?

**Remember: Cannot include both end points of each bar
Rule of thumb if they don't tell you... include _____ endpoint.

2. Display the data in a histogram.

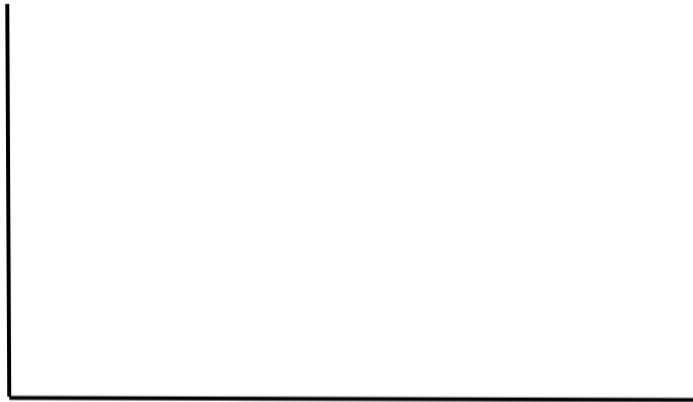
Total Cost (\$)	Frequency
$\$4000 \leq x < \5000	
$\$5000 \leq x < \6000	
$\$6000 \leq x < \7000	
$\$7000 \leq x < \8000	
$\$8000 \leq x < \9000	
$\$9000 \leq x < \10000	
$\$10000 \leq x < \11000	

State	Charges	State	Charges
Oklahoma	4205	Minnesota	6182
Hawaii	4734	Florida	6192
North Carolina	4858	Missouri	6326
Arkansas	4926	Colorado	6523
Tennessee	5130	South Carolina	6758
Texas	5175	Nevada	6908
Nebraska	5186	Indiana	6921
Idaho	5205	Oregon	6929
Wyoming	5237	Washington	7070
Mississippi	5248	Illinois	7482
Louisiana	5275	Ohio	7733
South Dakota	5319	Maine	7794
Kentucky	5324	California	7922
Utah	5349	Michigan	7949
New Mexico	5373	Virginia	7951
Georgia	5381	New York	7952
Alabama	5432	Delaware	8131
Kansas	5442	New Hampshire	8145
North Dakota	5513	Maryland	8297
Wisconsin	5615	Connecticut	8505
Iowa	5699	Massachusetts	8536
Arizona	5829	Pennsylvania	8665
West Virginia	5912	New Jersey	8714
Montana	5996	Rhode Island	9080
Alaska	6156	Vermont	10401

What can you tell me about the data from histogram?

Relative Frequency Histograms: Gives _____

Total Cost (\$)	Frequency	Relative Frequency
$\$4000 \leq x < \5000	4	
$\$5000 \leq x < \6000	20	
$\$6000 \leq x < \7000	9	
$\$7000 \leq x < \8000	8	
$\$8000 \leq x < \9000	7	
$\$9000 \leq x < \10000	1	
$\$10000 \leq x < \11000	1	



The relative frequency histogram has the _____ as its corresponding histogram.

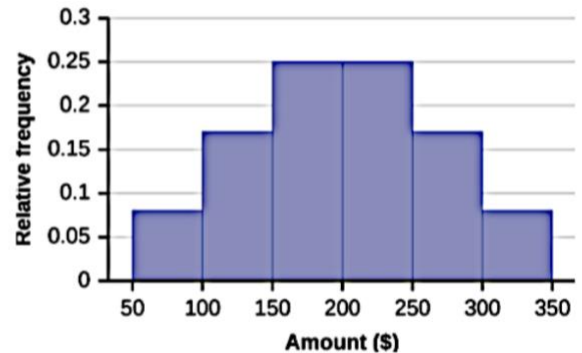
Example 1:

If there are 500 people on this cruise, find the total number of people who spent....

- a) $\$50 \leq x < \100

- b) $\$150 \leq x < \200

**Onboard Charges for Singles
7-Day Cruise Sailing
to the Mexican Riviera from LA**



- c) $\$250 \leq x < \300

Relative frequency histogram bar heights should all add up to _____ because that will equal 100%.

Bin width is the distance or length for each bin.

<p>If the histogram is skewed to the right.... Then the MEAN _____ MEDIAN</p>	<p>Median Mean</p>
<p>If the histogram is skewed to the left... then the MEAN _____ MEDIAN</p>	<p>Mean Median</p>