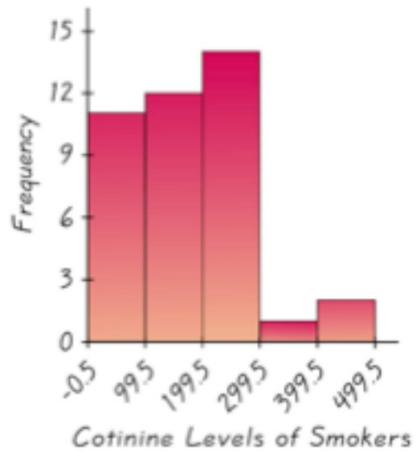


## 2.3 Histograms and Ogives

## Histogram

**A bar graph in which the horizontal scale represents the classes of data values and the vertical scale represents the frequencies.**

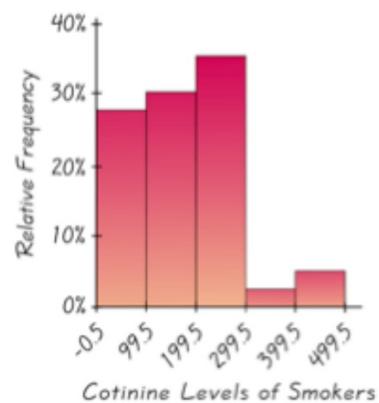
Cotinine	Frequency
0–99	11
100–199	12
200–299	14
300–399	1
400–499	2



## Relative Frequency Histogram

**Has the same shape and horizontal scale as a histogram, but the vertical scale is marked with relative frequencies.**

Cotinine	Relative Frequency
0–99	28%
100–199	30%
200–299	35%
300–399	3%
400–499	5%



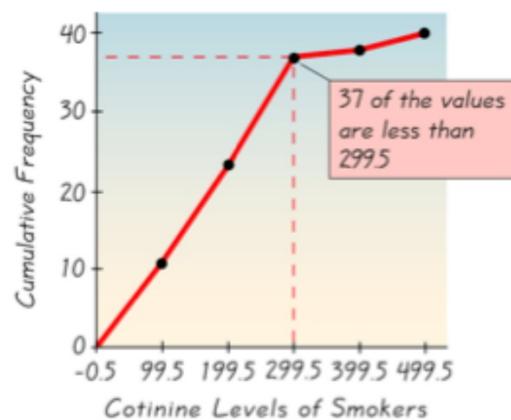
Construct a histogram from the data. Use 5 classes  
(heights of female students)

64 64 67 63 60 64 60 64 69 63 61 64 62  
66 64 68 61 59 61 64 62 61 60 60 64 65  
65 66 72 60

Make a relative frequency histogram

# Ogive

A line graph that depicts **cumulative frequencies**



Make an Ogive (using 5 classes)

Number of words typed in 5 minutes

174 181 219 213 213 207 116 111 143 160  
166 350 183 198 193 190 185 220 221 229  
257 243 281 308