

CLASS BOUNDARIES - because consecutive bars

Statistics: Guided Examples for 2.1 and 2.2

of a histogram must touch, bars must begin and end at class boundaries instead of class limits. Subtract 0.5 from lower limit & add 0.5 to upper limit to obtain class boundaries.

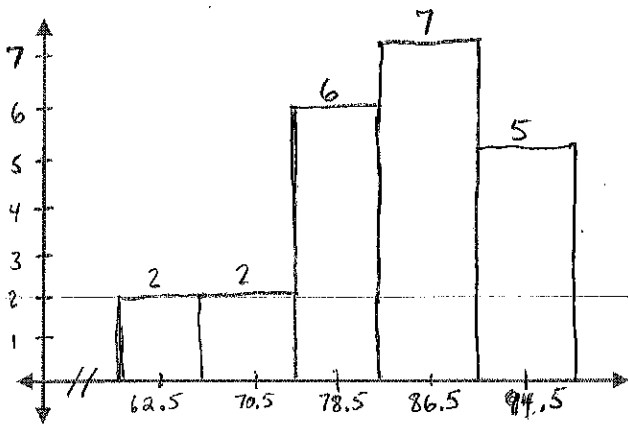
Data Set 1

Student Test Scores: 94, 91, 79, 84, 89, 85, 98, 80, 85, 74, 87, 85, 93, 68, 73, 82, 82, 90, 81, 78, 95, 59

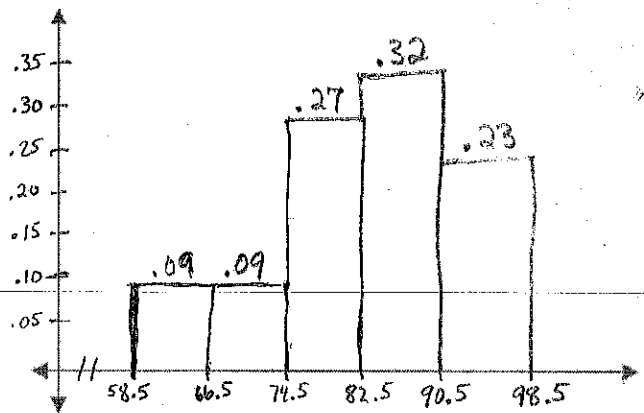
$n = 22$  # of Classes = 5 Range = 39 Class Width =  $\frac{39}{5} = 7.8 \rightarrow 8$

Class	CLASS BOUNDARIES	Midpoint	TALLY	Frequency, f	Relative Frequency	Cumulative Frequency
59 - 66	58.5 - 66.5	62.5		2	$2/22 = .09$	2
67 - 74	66.5 - 74.5	70.5		2	$2/22 = .09$	4
75 - 82	74.5 - 82.5	78.5		6	$6/22 = .27$	10
83 - 90	82.5 - 90.5	86.5		7	$7/22 = .32$	17
91 - 98	90.5 - 98.5	94.5		5	$5/22 = .23$	22
				$\Sigma f = 22$	$\Sigma \frac{f}{N} = 1$	

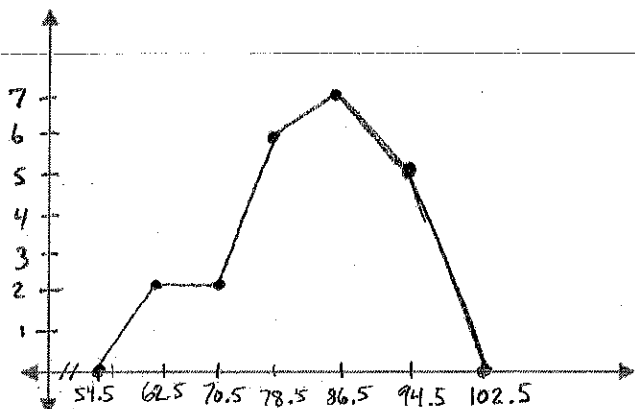
Frequency Histogram with Midpoints



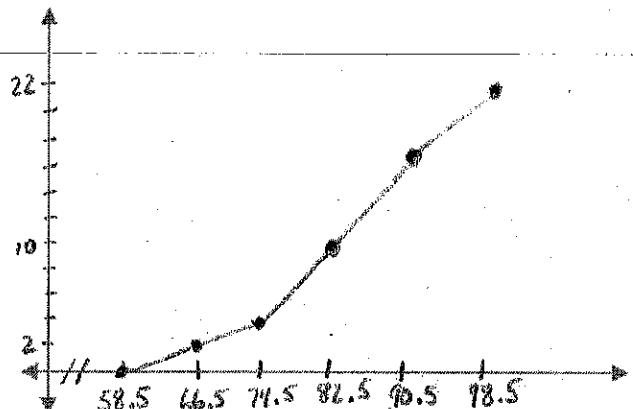
Relative Frequency Histogram with Class Boundaries



Frequency Polygon



Cumulative Frequency Graph (Ogive)



\* use midpoints on x-axis & subtract the class width from lowest mid & add class width to highest midpoint to get endpoints