

8/26 Section 2.1

Expanded Frequency Distribution Chart

We are adding Relative Frequency
and Cumulative Frequency

Relative Frequency is the percent in decimal form of each class' frequency over the number of pieces of data.

$$= \frac{f}{n}$$

The shape of the relative frequency distribution is the same as the histogram of the frequency distribution. The vertical scale is different.

#32

Pungencies		Frequency f	Midpoint	Relative Frequency f/n	Cummulative Frequency
Class	tally				
32-35 <u>31.5 - 35.5</u>		3	33.5	$\frac{3}{24} = .125$	3
36-39 <u>39.5</u>		9	37.5	$\frac{9}{24} = .375$	3+9 12
40-43 <u>43.5</u>		8	41.5	$\frac{8}{24} = .\bar{3}$	12+8 20
44-47 <u>47.5</u>		3	45.5	$\frac{3}{24} = .125$	20+3 23
48-51 <u>51.5</u>		1 1	49.5	$\frac{1}{24} = .042$	23+1 24
totals		$\Sigma f = 24$ Sum		$\Sigma \frac{f}{n} = 1$	

$n = 24$
 ↑
 This column is the # of pieces of data you're given.

↓
 Horizontal axis

↑
 When you add this column you always get 1.
 This means we got 100% of the data.

↑
 This is always n , the # of pieces of data.

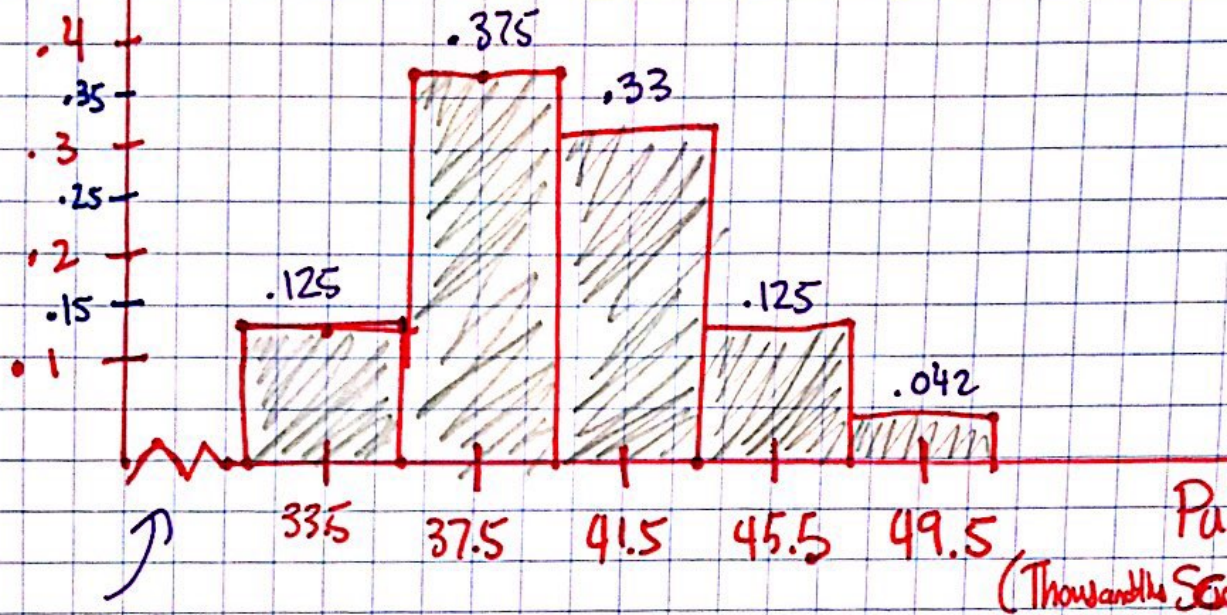
Vertical axis

Relative Frequency Distribution Histogram

Plot the midpoints on the horizontal

Relative Frequencies

Purgencies



Broken because we are not starting at zero.

Midpoints go on the horizontal axis evenly spaced.

The edges of the bars will be halfway between the midpoints