Annual incomes of U.S. adults in 2010

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(thousands of dollars)	percent
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10 - 25	28
25 - 50	27
50 - 100	18
100 - 150	7

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Yes, but they are such a small percent that they have been "swept in" just below \$150,000.

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Recall Lecture 1.3!

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Recall Lecture 1.3!

Can't simply use the percents as the heights of the bars, because the widths of the bars are unequal.

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area of the bar = percent in the interval

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height of bar =
$$\frac{20\%}{10 \text{ thousand dollars}} = 2\%$$
 per thousand dollars

Formula for height

$$\mbox{height of bar} \ = \ \frac{\mbox{\% in interval}}{\mbox{width of interval}} \ = \ \frac{\mbox{\% in interval}}{\mbox{right endpoint} - \mbox{left endpoint}}$$

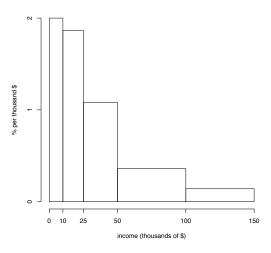
Formula for height

height of bar
$$=$$
 $\frac{\%$ in interval width of interval $=$ $\frac{\%$ in interval right endpoint $-$ left endpoint

the distribution table, along with the heights of the bars

income		height
(thousands of dollars)	percent	(% per thousand dollars)
0 - 10	20	20/10 = 2.00
10 - 25	28	28/15 = 1.87
25 - 50	27	27/25 = 1.08
50 - 100	18	18/50 = 0.36
100 - 150	7	7/50 = 0.14

A histogram



A histogram shows how a quantitative variable is distributed over all its values.

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• Units of height: % per unit on the horizontal axis