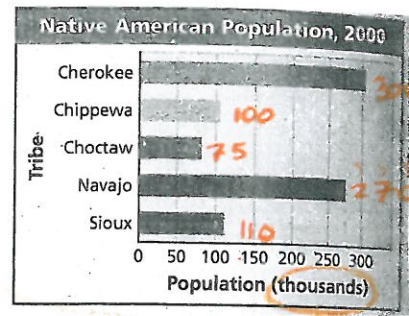


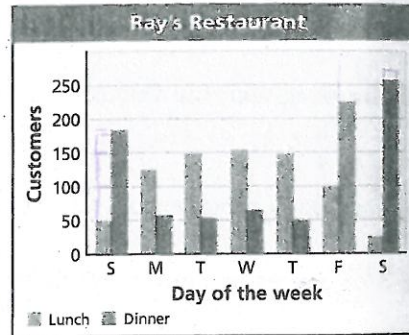
Use the bar graph at right for #1-3.



1. Estimate the range. *There is no range, these are categories, not numbers*
2. Approximate the number of people surveyed.  $\approx 855,000$
3. Approximately what percent of the total population shown in the table is Cherokee?

$300/855 = 35\%$

#4-6, Use the double bar graph at right.



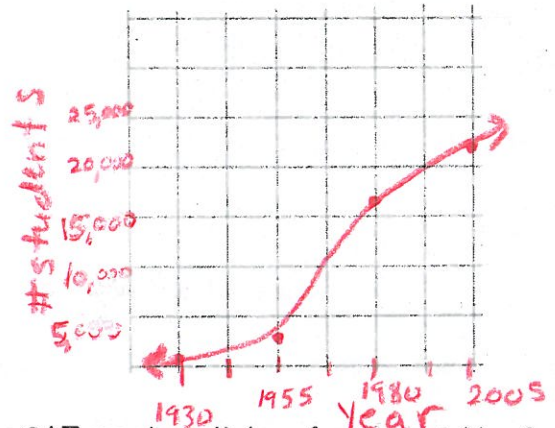
4. On what day did Ray have the busiest lunch? *Wednesday*
5. What day did Ray do the most overall business? *Friday*
6. On Sunday, about how many times as great was the number of dinner customers compared to lunch customers?

*3.5 times*

$50 \times X = 175$

7. Use the given data to make a line graph.

Year	Students
1930	586
1955	2,361
1980	15,897
2005	21,650



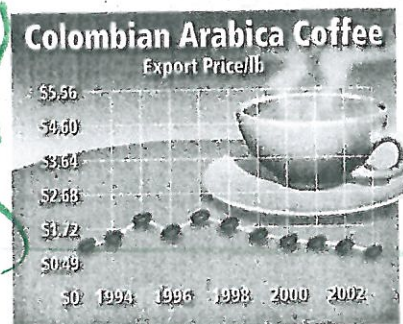
8. The scores of some 11<sup>th</sup> grade students on the math portion of the SAT are given. Make a frequency table of the data.

SAT Math Score	Total
500 - 599	7
600 - 699	5
700 - 799	3
<hr style="border: 1px solid black;"/>	
15	

520	560	720	690	540	630	790	540
600	580	710	500	540	660	630	

9. The graph shows the export price of Colombian Arabica coffee over 9 years. Explain why the graph is misleading and who might want to use this graph.

*The vertical axis is so high it makes the changes in price seem small - flat, like there was little change. Growers might use this graph to portray uniform prices*



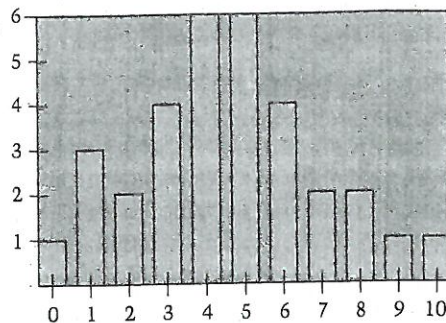
complete! include every # on scale

also, scale Unequal

10. a. Construct a box and whiskers plot of the data given in graph.

0, 1, 1, 1, 2, 2, 3, 3, 3, 3

Did you label?



b. Would 11 be an outlier for this set of data?

$(3)(1.5) = 4.5$   $(-1.5)(10.5)$ , yes 11 is outlier

11. The maximum daily temperatures for each month in San Diego and Miami are shown below.

a. Find the 3 measures of central tendency for each city.

Month	Miami (°C)	San Diego (°C)
January	24.0	18.8
February	24.7	19.2
March	26.2	19.1
April	28.0	20.2
May	29.6	20.6
June	30.9	22.0
July	31.7	24.6
August	31.7	25.4
September	31.0	25.1
October	29.2	23.7
November	26.9	21.1
December	24.8	18.9

San Diego ← Miami

$\bar{x}$  : 21.56      28.23

median: 20.85      28.6

mode: none      31.7

b. Find the two measures of spread for each city.

San Diego      Miami

range = 6.6      7.7

S.D = 2.53       $\sqrt{6.4}$       2.86       $\sqrt{8.16}$

c. Which city has the most consistent high temperatures?

San Diego, s.dev. is lower

#12-15, Use the sketches at right.

12. Which distribution is symmetric?

b (2d)

13. Which distribution is skewed-left?

a

14. Think about the scores of ice hockey games. Which graph would describe these scores?

c

15. Which graph has a mean that is less than the mode?

a

