

pg. 660 #1-25

1. $3 \quad 4 \quad | \quad 5 \quad 5 \quad (6) \quad 6 \quad 7 \quad | \quad 7 \quad 8$
range $8 - 3 = 5$
 4.5 7

$IQR = 2.5$

2. $20 \quad 34 \quad | \quad 56 \quad (67) \quad 78 \quad 91 \quad | \quad 125$ range: $125 - 20 = 105$
IQR $91 - 34 = 57$

3. $187 \quad 190 \quad 300 \quad | \quad 324 \quad 345 \quad 456 \quad (670) \quad 724$
 $732 \quad 760 \quad | \quad 786 \quad 879 \quad 891$
 312
 773

range $891 - 187 = 704$
IQR $773 - 312 = 461$

4. $\bar{x} = 258.57$ } GC
 $\sigma = 228.3$ }

5.	x	\bar{x}	$x - \bar{x}$	$(x - \bar{x})^2$
	10	15.1	-5.1	26.01
	12	15.1	-3.1	9.61
	13	15.1	-2.1	4.41
	15	15.1	-0.1	.01
	17	15.1	1.9	3.61
	18	15.1	2.9	8.41
	21	15.1	5.9	34.81

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

$$\sigma = \sqrt{\frac{86.87}{7}}$$

$106 \div 7 = 15.1$

$\sigma = 3.52$

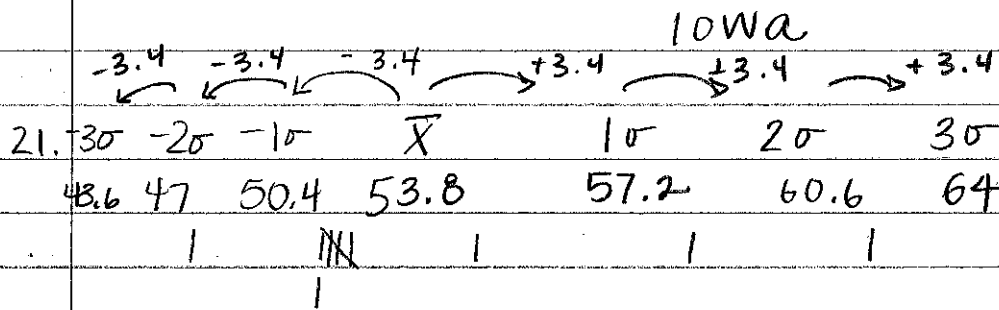
17. 2001 \approx 6707 } GC
 2002 \approx 6738 }

18. 2001 = 10653 - 2938 = 7715 Overall, they
 2002 10834 - 3223 = 7611 made more in
 2002 and had
 less change high-lo.

19. 2001 σ = 2678.9 In 2001 the values were
 2002 σ = 2759.0 closer to the mean.

20. $\bar{x} = 6706.86$ $\left(\frac{1.4 = x - 6706.89}{2678.9} \right) 2678.9$

$$\begin{array}{r} 3750.46 = x - 6706.89 \\ + 6706.89 \quad + 6706.89 \\ \hline 10,457 = x \end{array}$$



w/in 1 σ (-1 - 1) 7
 w/in 2 σ (-2 - 2) 2 + 7 = 9
 w/in 3 σ (-3 - 3) 1 + 9 = 10

22. $\sigma = 3.3$
 $\sigma^2 = 10.89$

23. $\sigma = 8.7$
 $\sigma^2 = 75.7$

24. $\sigma = 1.4$
 $\sigma^2 = .1.96$

25. $\sigma = .08$
 $\sigma^2 = .0064$