

Box-and-Whisker Plots

Input the given data into lists of your graphing calculator. Let

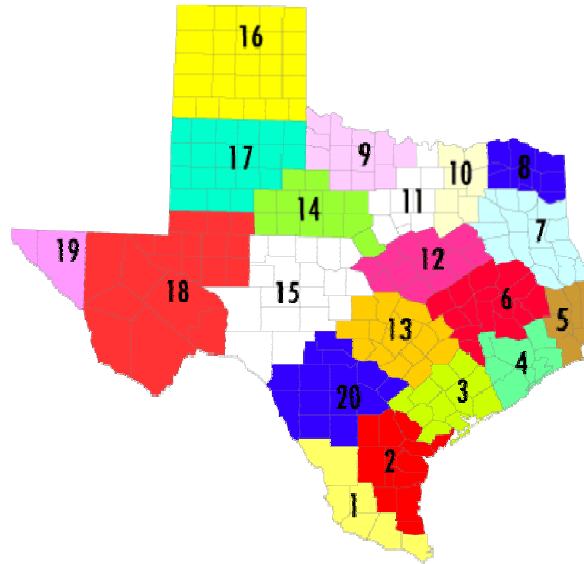
L1 = Texas Education Region Numbers

L2 = Total Students Enrolled in Region 1987-88

L3 = Total Students Enrolled in Region 1997-98

1. Set up STAT PLOT 1 for a regular Boxplot (the fifth type) of L2 and graph. Trace the Boxplot. What values occur, and what do these values represent?
2. Set up STAT PLOT 2 for a modified Boxplot (the fourth type) of L2 and graph. Trace the modified Boxplot of L2. What values occur, and what do these values represent?
3. How does the modified Boxplot differ from the regular Boxplot?
4. Set up STAT PLOT 3 for a Histogram of L2, use the window (0, 900000, 100000, -3, 15, 0) and graph. How does the information provided by the Histogram differ from the Boxplots?
5. Turn off STAT PLOT 1 and create a modified Boxplot of L3 in STAT PLOT 3. How do the modified Boxplots of L2 and L3 differ?

Texas Student Enrollment Trends by Region (1987-88 to 1997-98)



Enrollment Trends 1987-88 to 1997-98			
	1987 – 1988	1997 – 1998	
Region L1	Total Students L2	Total Students L3	Total Students Δ L4
1 Edinburg	222,668	284,614	61,946
2 Corpus	108,956	112,212	3,256
3 Victoria	56,229	57,730	1,501
4 Houston	659,516	828,262	168,746
5 Beaumont	85,989	87,565	1,576
6 Huntsville	100,438	128,360	27,922
7 Kilgore	146,063	158,973	12,910
8 Mt. Pleasant	52,752	55,766	3,014
9 Wichita Falls	40,517	42,388	1,871
10 Richardson	426,631	549,212	122,581
11 Fort Worth	286,784	380,827	94,043
12 Waco	109,388	132,990	23,602
13 Austin	180,493	247,989	67,496
14 Abilene	48,207	50,444	2,237
15 San Angelo	48,950	52,654	3,704
16 Amarillo	77,765	80,711	2,946
17 Lubbock	82,632	82,944	312
18 Midland	79,417	84,365	4,948
19 El Paso	132,013	153,710	21,697
20 San Antonio	279,508	319,797	40,289