Measures of Variability

Enrollment Trends 1987-88 to 1997-98				
		1987 – 1988	1997 – 1998	
	Region	Total Students	Total Students	Total Students Δ
	L1	L2	L3	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

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. Determine the *sample variance* of the data stored in L3.
- 2. Determine the sample standard deviation of the data stored in L3. For the given list of data (L3), what is the meaning of this number?
- 3. Determine the *range* of the data. What is the meaning of the *range* for the data stored in L3?
- 4. Determine the *interquartile range* of the data. What is the meaning of the *interquartile range* for the data stored in L3?