

Standardizing Scores

Enrollment Trends 1987-88 to 1997-98			
	1987 – 1988	1997 – 1998	
Region L1	Total Students L2	Total Students L3	Total Students Δ L4
1	222,668	284,614	61,946
2	108,956	112,212	3,256
3	56,229	57,730	1,501
4	659,516	828,262	168,746
5	85,989	87,565	1,576
6	100,438	128,360	27,922
7	146,063	158,973	12,910
8	52,752	55,766	3,014
9	40,517	42,388	1,871
10	426,631	549,212	122,581
11	286,784	380,827	94,043
12	109,388	132,990	23,602
13	180,493	247,989	67,496
14	48,207	50,444	2,237
15	48,950	52,654	3,704
16	77,765	80,711	2,946
17	82,632	82,944	312
18	79,417	84,365	4,948
19	132,013	153,710	21,697
20	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 *mean and standard deviation* of the data stored in L3.
2. Standardize the data listed in L3 and store the results in L4.
z-score = $(X - \text{mean}) / \text{standard deviation}$
3. Find the sum of the z-scores listed in L4.
4. What do the z-scores tell us?