

# Measures of Variability

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

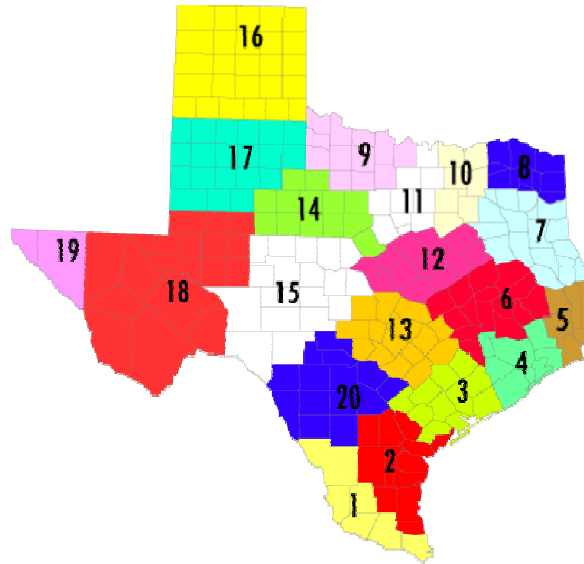
**L1 = Texas Education Region Numbers**

**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?

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



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