## Order of Operations on the TI-89

**Enter the following problems on your graphing calculator.** I've included the answers so you will know that you have entered them correctly and pointed out some common mistakes that are made.

1. 
$$18 \div 3 \cdot 7^2 - 6$$

Answer = 288

Use ^ to enter the exponent.

2. 
$$4\sqrt{325-225}-120\div 5$$

Answer = 16

Be sure to put the radicand (325-225) in parentheses.

3. 
$$\frac{3-7^2}{1+5^3}$$

Answer = -23/63 = -.36508

The numerator and denominator must be placed in parentheses.  $(3-7^2) \div (1+5^3)$ 

Be sure you know how to get your answer as either a fraction or a decimal.

On the TI-89, if your Exact/Approx Mode is set to Auto, <u>Enter</u> will give your answer in the exact form, which is the fraction form. <u>Diamond Enter</u> will give your answer in decimal form.

4. 
$$\frac{20(-7+11)}{-2^2} - \frac{(-6^2+16)}{-16-(-15)}$$
 Answer = -40

Be sure to use - for subtraction and (-) for negative numbers.

The denominator of the second fraction needs to be placed in parentheses.