Math 2 Name: _____
Module 0, Day 6 Date: _____ Period: ____

Graphing Calculator Investigation Part I

Use a graphing calculator to answer the following.

1. Order of Operations

a) Do parentheses matter? Compute the following in your calculator: $-9^2 =$ $(-9)^2 =$

b) Why are these different? _____

_____

c) We know $\frac{100+50}{5} = \frac{150}{5} = 3$ How do you put $\frac{100+50}{5}$ into the calculator so that the value is 3? What did you have to do? _____

2. Exponents

Use the key _____ to make an exponent. Compute the following in the calculator:

$7^9 =$ $3^2 + 5^4 =$

3. Square Roots, Cube Roots, and Higher Roots

Use the key(s) _____ to get roots.

$\sqrt[3]{27} =$ $\sqrt[3]{64} =$ $\sqrt[5]{-32} =$ $\sqrt[5]{243} =$

4. Simplify Fractions

Enter $120 \div 180$. You should get 0.6666666667. To change the decimal back to a fraction, use the keys(s):

_____

Write both the decimal and simplified fraction: $\frac{91}{175} =$ $\frac{3}{8} + \frac{2}{3} =$

5. Graphing Functions

Use the key(s) _____ to enter an equation that you will graph.

a) Enter $y_1 = 3x + 2$ into the calculator. Where are the variables located on the calculator? _____

Sketch a graph of the line on the axes provided. You may have to put your calculator's graphing window in "standard" view. Select these keys to get a standard window: _____

b) Enter $y = 2^x$ into the calculator, then sketch the graph.

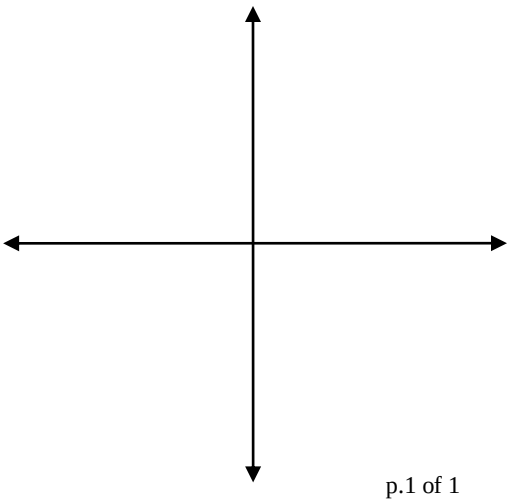
c) How many points of intersection are there? _____
How do you know?

_____

_____

_____

_____



6. Clear/Reset the Calculator: Select the keys:

_____