THE LOCATION PRINCIPLE

Use the table of values below to name the two integers in which a real root must fall between.

1)

x	-1	0	**1**	**2**	3
f(x)	12	4	**1**	**-3**	-11

Root exists between: ___x = 1 and x = 2___

Think of a "root" as an x-intercept of a graph. The y-values must change from a positive to a negative (or vice versa) in order for the graph to cross the x-axis.

Using the table, determine how many real roots can be approximated. Then, name the integers in which each root lies between.

2)

x	-6	**-5**	**-4**	-3	**-2**	**-1**	**0**	**1**	2	3	**4**	**5**	6
f(x)	-0.9	**-0.2**	**0.5**	1.5	**0.2**	**-2**	**-2**	**3**	6	3	**1**	**-10**	-50

Number of real roots: ___4___

Roots exist between: ___x = -5 & x = -4, x = -2 & x = -1, x = 0 & x = 1, x = 4 & x = 5___

*This information **will appear** on your next quiz, but we will not waste our time doing homework*