

# Warm Up:

notation means x-value ONLY

If  $f(x) = 3|x| - 1$  and  $g(x) = 0.03x^3 - x + 1$ , an approximate solution for the equation  $f(x) = g(x)$  is

~~(1) 1.96~~

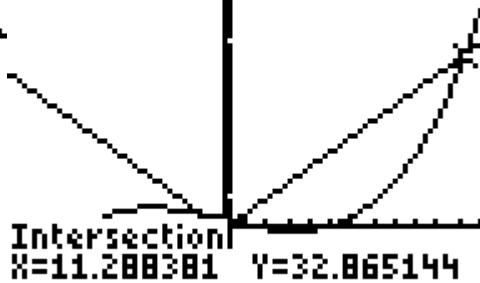
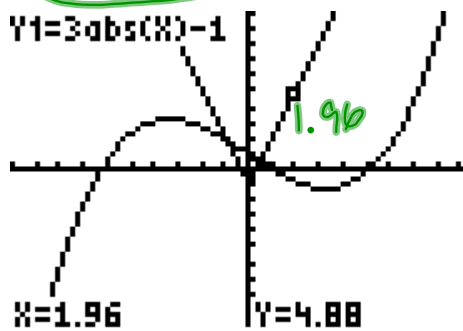
(2) 11.29

~~(3) (-0.99, 1.96)~~

~~(4) (11.29, 32.87)~~

2nd  
trace  
intersect

look for a rounded number



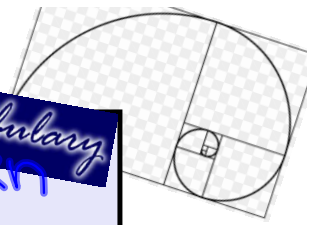
# Recursive Sequences

sequence - list of #'s w/ a pattern

recursive sequence - defined by knowing PREVIOUS TERM

\* define a term & what you do to PREVIOUS TERM

Vocabulary



Write a recursive sequence for each of the following sequences:

+6 -4, 2, 8, 14, ...

1st TERM →  $a_1 = -4$

nth TERM →  $a_n = a_{n-1} + 6$

PREVIOUS TERM

9, -3, 1,  $-\frac{1}{3}$ , ...

$a_1 = 9$

$a_n = \frac{a_{n-1}}{-3}$

x4 2, 8, 32, ...

$a_1 = 2$

$a_n = (a_{n-1})(4)$

-6 7, 1, -5, -11, ...

$a_1 = 7$

$a_n = a_{n-1} - 6$