Advanced Math
1-4
(Day 1)
Analyzing graphs of Functions

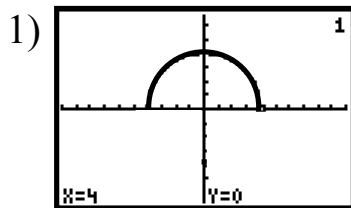
domain: actual-

graphical-

range: actual-

graphical-
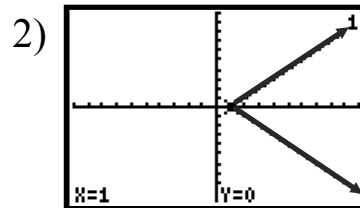

Identify the domain and range of each relation. Is the relation a function?

1)

X=4   Y=0

domain:_____

range:_____

function? _____

2)

X=1   Y=0

domain:_____

range:_____

function?_____

odd function: actual-

useful-

even function: actual-

useful-

Use a graphing utility to graph each function. Then determine the intervals over which the function is increasing, decreasing, or constant. Determine whether the function is odd, even, or neither.
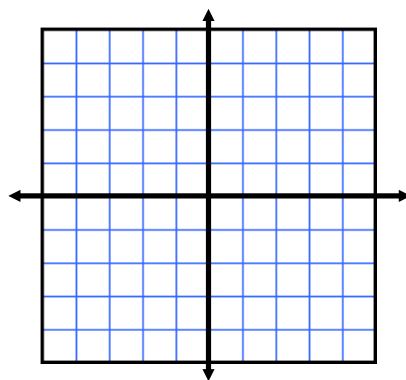
23) $f(x) = 3x^4 - 6x^2$

increasing_____

decreasing_____

constant_____

odd / even / neither
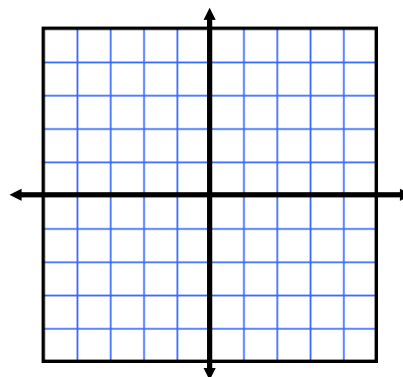
Sketch the graph of the function and determine whether it is odd, even, or neither.

45) $f(x) = \begin{cases} x + 3, & x \le 0 \\ 3, & 0 < x \le 2 \\ 2x - 1, & x > 2 \end{cases}$

Graph the function and determine the intervals for which $f(x) \ge 0$

49*) $f(x) = x^2 - 4$

Assignment:
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1-12 all,
19-22 all,
36-56 even.