TOPIC: PROPERTIES OF FUNCTIONS

Summary of Function Properties

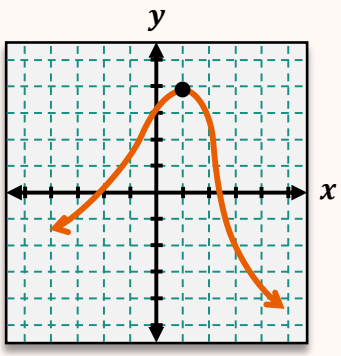
◆ You'll need to identify different characteristics of functions *from* their graphs & *to* graph them.

PROPERTIES OF FUNCTIONS

Max

$f(c)$ **[≥ | ≤]** $f(x)$

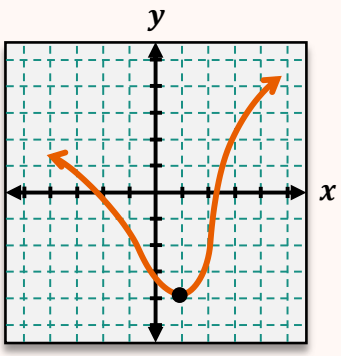
for all x



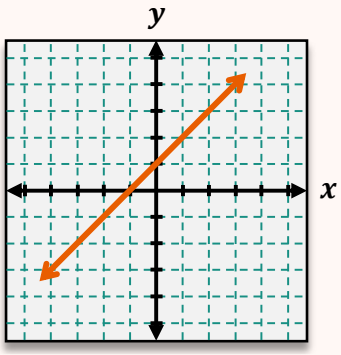
Min

$f(c)$ **[≥ | ≤]** $f(x)$

for all x

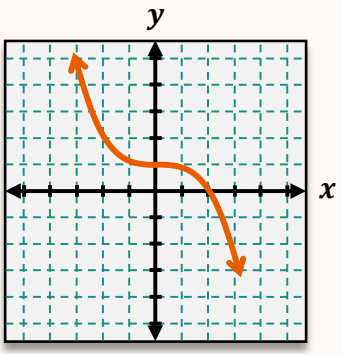


Increasing



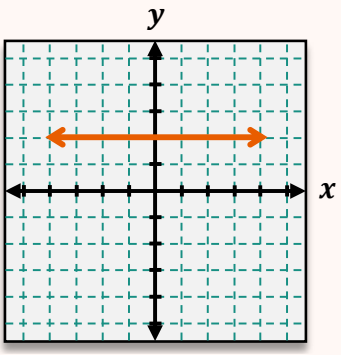
Graph **[↑ | ↓]** to the right

Decreasing



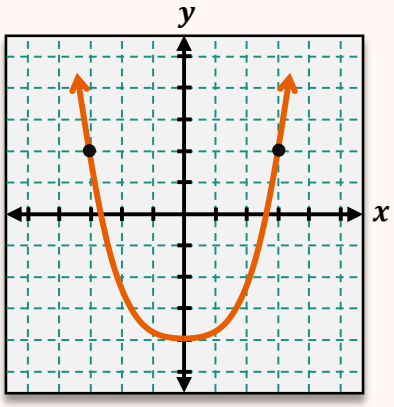
Graph **[↑ | ↓]** to the right

Constant



Graph is _____

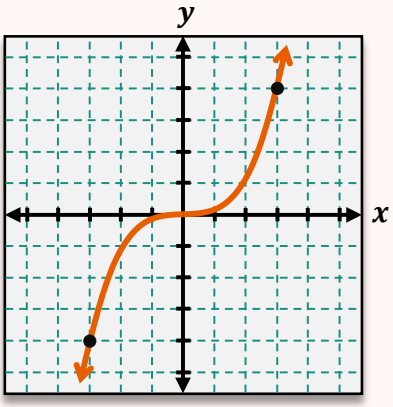
Symmetric on y – axis



[EVEN | ODD | NOT A] function

$f(-x) =$ _____

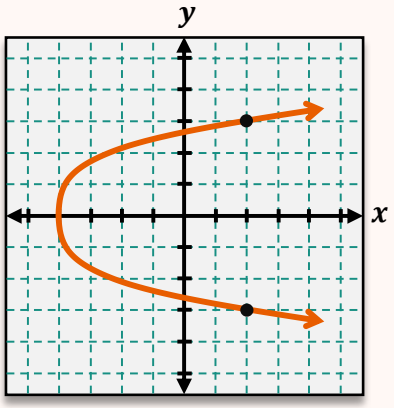
Symmetric about Origin



[EVEN | ODD | NOT A] function

$f(-x) =$ _____

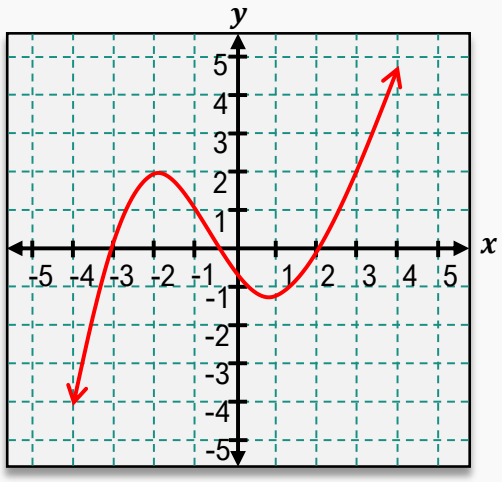
Symmetric on x – axis



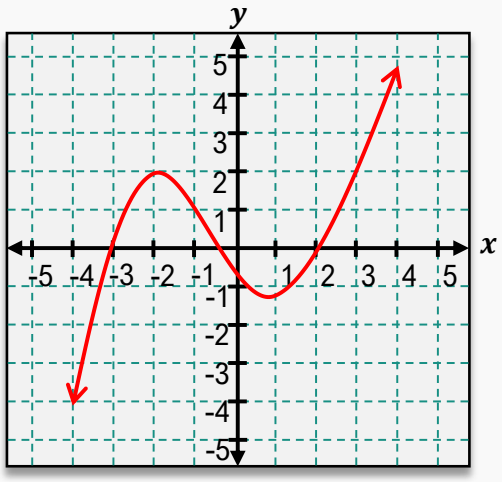
[EVEN | ODD | NOT A] function

TOPIC: PROPERTIES OF FUNCTIONS

PRACTICE Given the graph of the following function, determine the intervals on which $f(x)$ is increasing.



PRACTICE Given the graph of the following function, determine the intervals on which $f(x)$ is decreasing.



TOPIC: PROPERTIES OF FUNCTIONS

PRACTICE Given the graph of the following function, determine where the graph reaches a maximum.