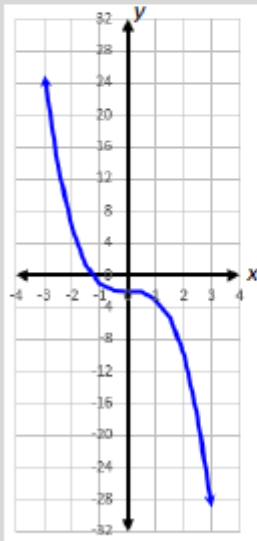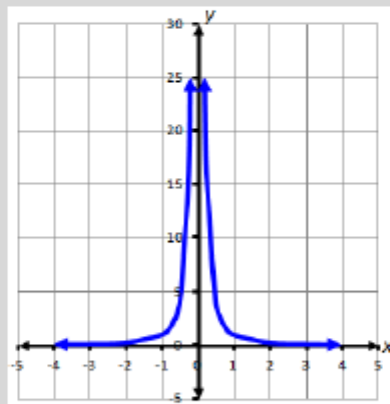# Increasing/ Decreasing

A function can be described as increasing, decreasing, or constant over a specified interval or the entire domain.

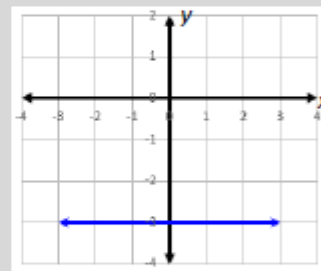## Examples:

f(x) is increasing over $\{x | -\infty < x < 0\}$ because the values of *f(x)* increase as the values of *x* increase.

f(x) is constant over the entire domain because the values of *f(x)* remain constant as the values of *x* increase.

f(x) is decreasing over the entire domain because the values of *f(x)* decrease as the values of *x* increase.

f(x) is decreasing over $\{x | 0 < x < +\infty\}$ because the values of *f(x)* decrease as the values of *x* increase.