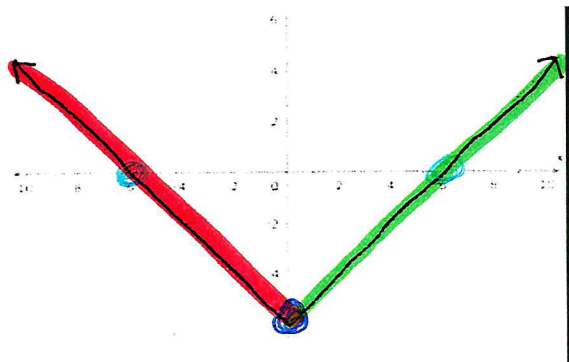


Name: Key Hour: _____ Date: _____

Increasing, Decreasing & Constant Intervals and End Behavior Practice II

For each of the following graphs determine the domain, range, increasing, decreasing and/or constant intervals, x-intercepts, y-intercepts and describe the end behavior.



Domain: $(-\infty, +\infty)$

Range: $[-6, +\infty)$

Increasing: $(0, +\infty)$

Decreasing: $(-\infty, 0)$

Constant: N/A

x-intercepts: $(-6, 0), (6, 0)$

y-intercepts: $(0, -6)$

End Behavior: (Indicate both left and right end behavior)

Left
as $x \rightarrow -\infty$
 $y \rightarrow +\infty$

Right
as $x \rightarrow +\infty$
 $y \rightarrow +\infty$

Domain: $(-\infty, +\infty)$

Range: $[-1, +\infty)$

Increasing: $(2, +\infty)$

Decreasing: $(-\infty, 2)$

Constant: N/A

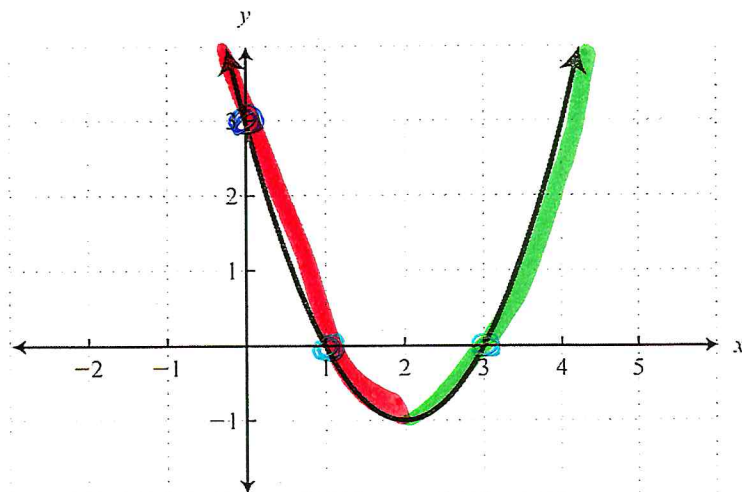
x-intercepts: $(1, 0), (3, 0)$

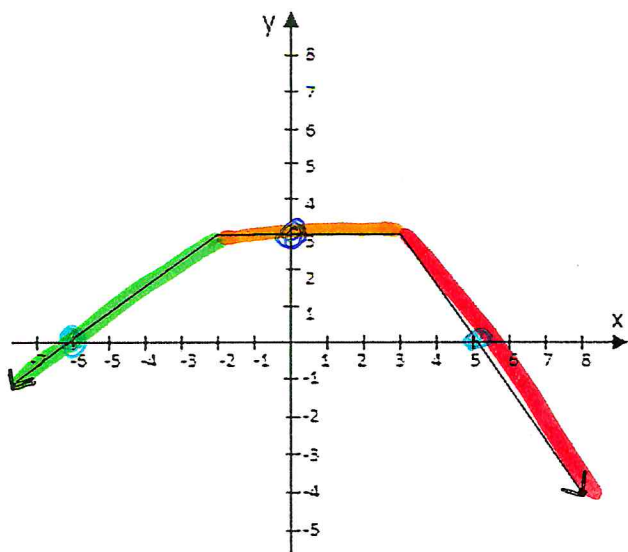
y-intercepts: $(0, 3)$

End Behavior: (Indicate both left and right end behavior)

Left
as $x \rightarrow -\infty$
 $y \rightarrow +\infty$

Right
as $x \rightarrow +\infty$
 $y \rightarrow +\infty$





Domain: $(-\infty, +\infty)$

Range: $(-\infty, 3]$

Increasing: $(-\infty, -2)$

Decreasing: $(3, +\infty)$

Constant: ~~none~~ $(-2, 3)$

x-intercepts: $(-6, 0), (5, 0)$

y-intercepts: $(0, 3)$

End Behavior: (Indicate both left and right end behavior)

Left
~~as $x \rightarrow -\infty$~~
 as $x \rightarrow -\infty$
 $y \rightarrow -\infty$

Right
 as $x \rightarrow +\infty$
 $y \rightarrow -\infty$

Sketch a graph with *both* an increasing and decreasing interval that meets the following conditions:

Domain $[-6, 7)$

Range $[-2, 3)$

