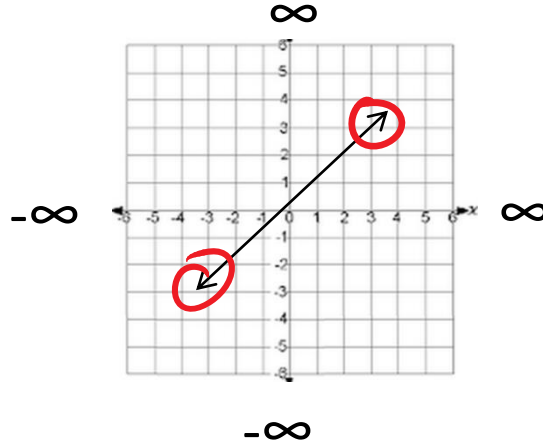


Unit 3 Day 11: End Behavior



A New Idea... **END BEHAVIOR**

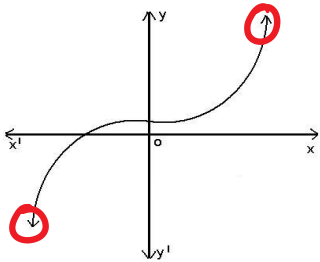
End Behavior explains what happens to your y values as your x values approach $-\infty$ and ∞



HINT: Start by circling the ends of your graph! (All we need to do is look at which direction they are pointing!)

Let's Practice! Determine the end behavior of the following graphs.

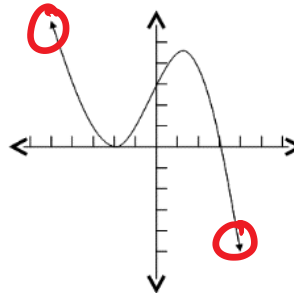
1.



As $x \rightarrow -\infty$, $y \rightarrow -\infty$

As $x \rightarrow \infty$, $y \rightarrow \infty$

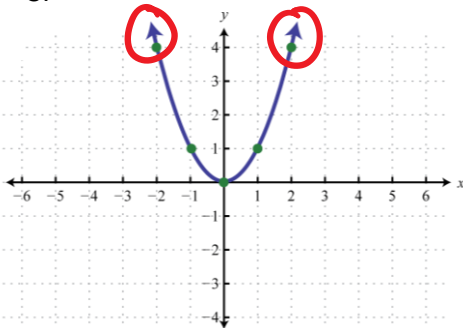
2.



As $x \rightarrow -\infty$, $y \rightarrow \infty$

As $x \rightarrow \infty$, $y \rightarrow -\infty$

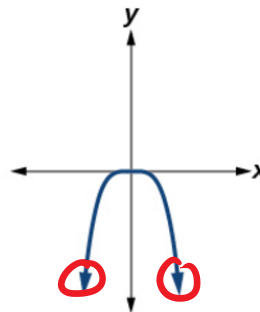
3.



As $x \rightarrow -\infty$, $y \rightarrow \infty$

As $x \rightarrow \infty$, $y \rightarrow \infty$

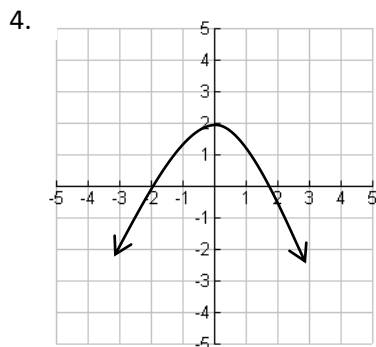
4.



As $x \rightarrow -\infty$, $y \rightarrow -\infty$

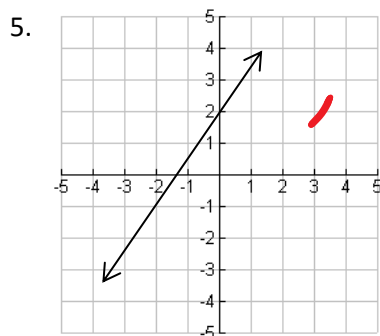
As $x \rightarrow \infty$, $y \rightarrow -\infty$

YOU TRY!!



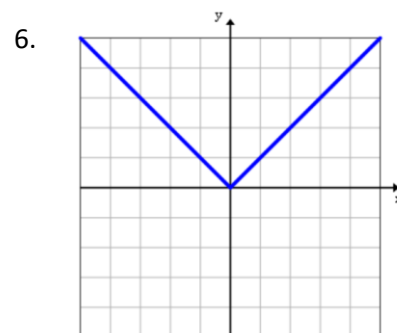
As $x \rightarrow -\infty$, $y \rightarrow -\infty$.

As $x \rightarrow \infty$, $y \rightarrow -\infty$.



As $x \rightarrow -\infty$, $y \rightarrow -\infty$.

As $x \rightarrow \infty$, $y \rightarrow \infty$.



As $x \rightarrow -\infty$, $y \rightarrow \infty$.

As $x \rightarrow \infty$, $y \rightarrow \infty$.

CHALLENGE!! Can you draw a function with the following end behavior?

1) As $x \rightarrow -\infty$, $y \rightarrow -\infty$
As $x \rightarrow \infty$, $y \rightarrow -\infty$

2) As $x \rightarrow -\infty$, $y \rightarrow -\infty$
As $x \rightarrow \infty$, $y \rightarrow \infty$

3) As $x \rightarrow -\infty$, $y \rightarrow \infty$
As $x \rightarrow \infty$, $y \rightarrow -\infty$

