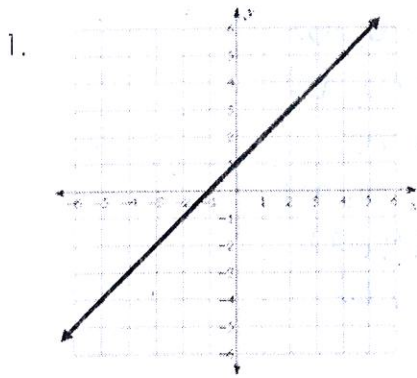
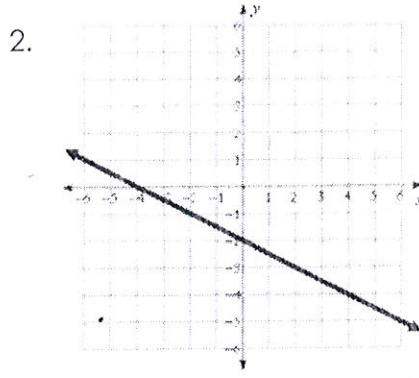


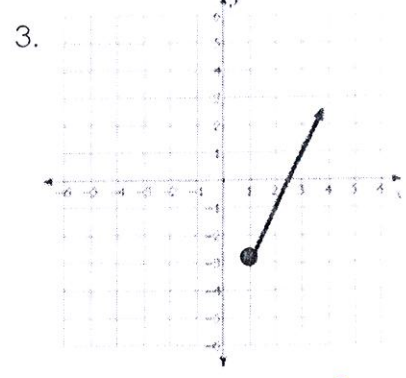
**End Behavior:** the behavior at the end of the graph ( $-\infty$  or  $\infty$ ) as  $x$  approaches negative infinity (left) or positive infinity (right). Find the left and right end behavior of each function below.



Left End Behavior:  $-\infty$   
Right End Behavior:  $\infty$

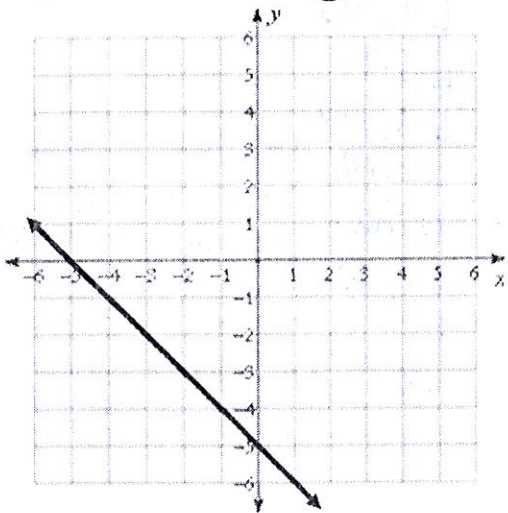


Left End Behavior:  $\infty$   
Right End Behavior:  $-\infty$



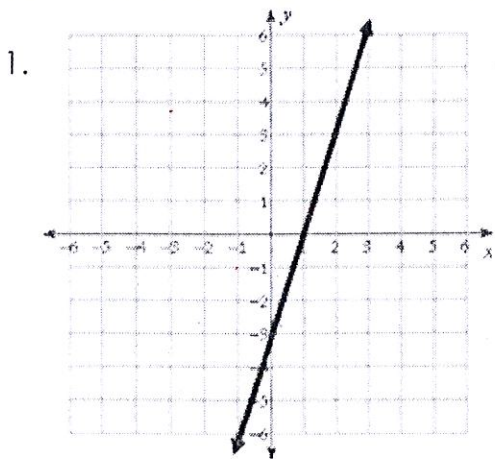
Left End Behavior:  $-\infty$   
Right End Behavior:  $\infty$

## Put it all together!



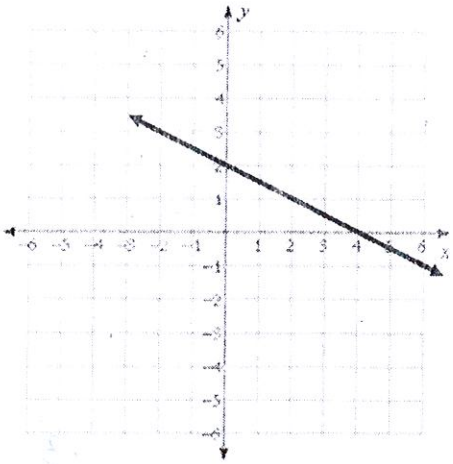
Characteristic	Answer
Rate of Change	$m = -1$
Domain	$(-\infty, \infty)$
Range	$(-\infty, \infty)$
Increasing Interval	none
Decreasing Interval	$(-\infty, \infty)$
x-intercept	$(-5, 0)$
y-intercept	$(0, -5)$
Left End Behavior	
Right End Behavior	

Classwork/Homework: Fill in the characteristics table for each function below.



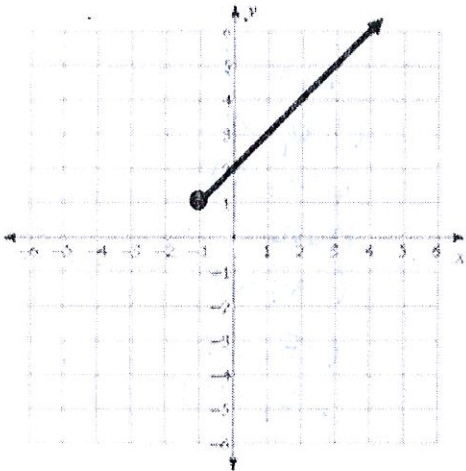
Characteristic	Answer
Rate of Change	$m = 3$
Domain	$(-\infty, \infty)$
Range	$(-\infty, \infty)$
Increasing Interval	$(-\infty, \infty)$
Decreasing Interval	none
x-intercept	$(1, 0)$
y-intercept	$(0, -3)$
Left End Behavior	$-\infty$
Right End Behavior	$\infty$

2.



Characteristic	Answer
Rate of Change	$-\frac{1}{2}$
Domain	$(-\infty, \infty)$
Range	$(-\infty, \infty)$
Increasing Interval	none
Decreasing Interval	$(-\infty, \infty)$
x-intercept	$(4, 0)$
y-intercept	$(0, 2)$
Left End Behavior	$\infty$
Right End Behavior	$-\infty$

3.



Characteristic	Answer
Rate of Change	1
Domain	$[-1, \infty)$
Range	$[1, \infty)$
Increasing Interval	$[-1, \infty)$
Decreasing Interval	none
x-intercept	none
y-intercept	$(0, 2)$
Left End Behavior	1 As $x \rightarrow -$
Right End Behavior	$\infty$