

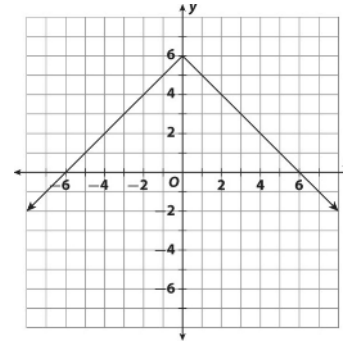
**LESSON**  
**1-2**

# Characteristics of Function Graphs

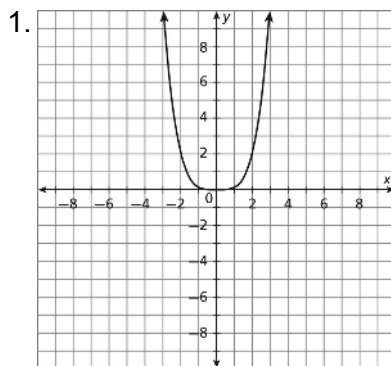
## Reteach

### Example

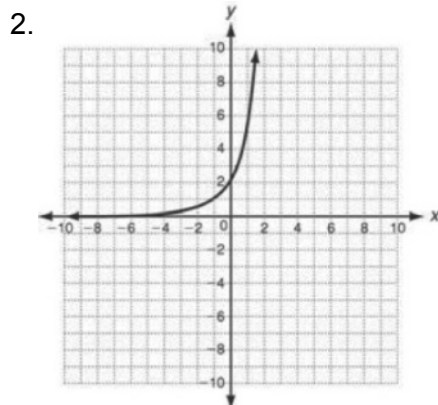
<u>Attribute of Function</u>	<u>Graph Characteristic</u>	<u>Interval</u>
Positive	Above $x$ -axis	$(-6, 6)$
Negative	Below $x$ -axis	$(-\infty, -6) \cup (6, +\infty)$
Zero(s)	Crosses $x$ -axis	$x = -6, x = 6$
Increasing	Uphill (from left-right)	$(-\infty, 0)$
Decreasing	Downhill (from left-right)	$(0, +\infty)$
Local Maximum	Top of "peak"	$f(x) = 6$ at $x = 0$
Local Minimum	Bottom of "valley"	None



Fill in the blanks for the attributes of the functions shown in the graphs below.



$f(x)$  is positive on the interval \_\_\_\_\_  
 $f(x)$  has a zero at  $x =$  \_\_\_\_\_  
 $f(x)$  is increasing on the interval \_\_\_\_\_  
 $f(x)$  is decreasing on the interval \_\_\_\_\_  
 $f(x)$  has a local minimum of \_\_\_\_\_ at  $x =$  \_\_\_\_\_



$f(x)$  is positive on the interval \_\_\_\_\_  
 $f(x)$  is negative on the interval \_\_\_\_\_  
 $f(x)$  has a zero at  $x =$  \_\_\_\_\_  
 $f(x)$  is increasing on the interval \_\_\_\_\_  
 $f(x)$  is decreasing on the interval \_\_\_\_\_