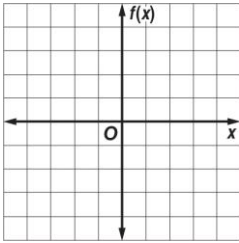


# 3-8 Practice

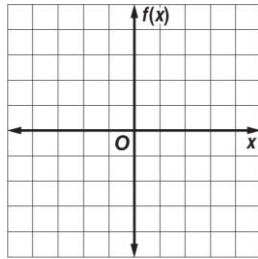
## Absolute Value Functions

Graph each function. State the domain and range.

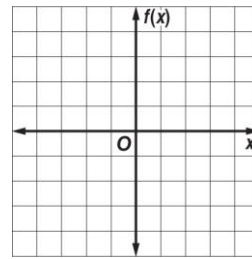
1.  $f(x) = |x| - 1$



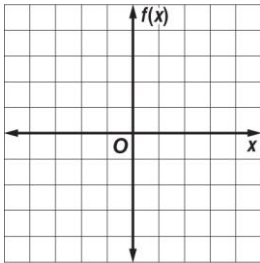
2.  $f(x) = |x + 1| - 2$



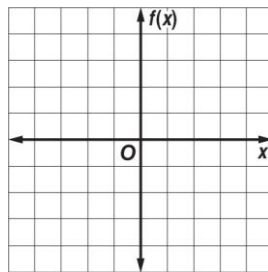
3.  $f(x) = -\left|\frac{1}{2}x\right| + 1$



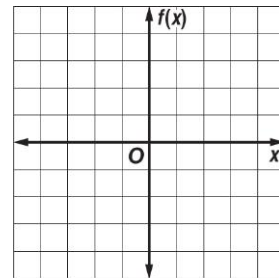
4.  $f(x) = |2x + 4| - 3$



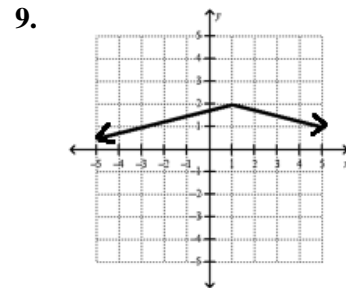
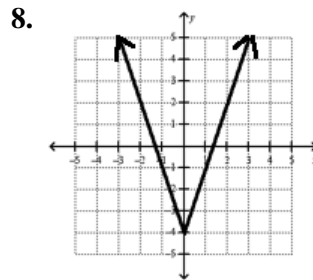
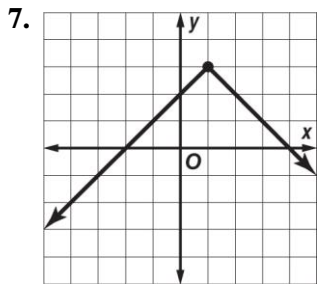
5.  $f(x) = -|x - 2| + 4$



6.  $f(x) = -|2x + 2| + 3$



Determine the domain and range of each function.



10. **DISTANCE** The function  $y = \frac{5}{4}|x - 5|$  models Ryan's distance in feet from the swings on a playground after  $x$  seconds.

a. Graph the function.

b. After how many seconds will Ryan reach the swings?

