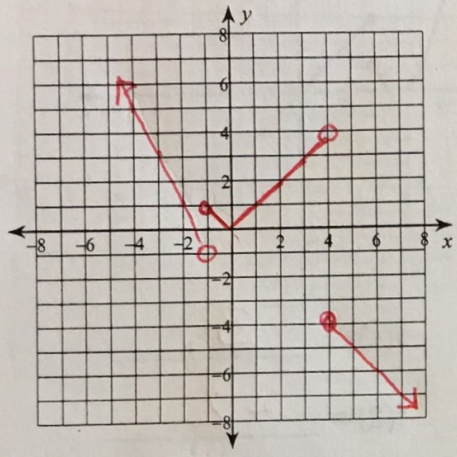
Review Unit 1

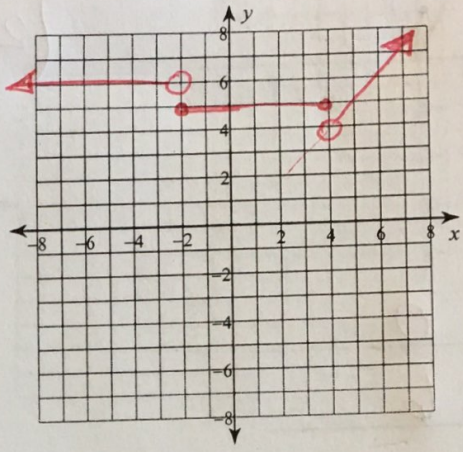
Name Key

Sketch the graph of each function.

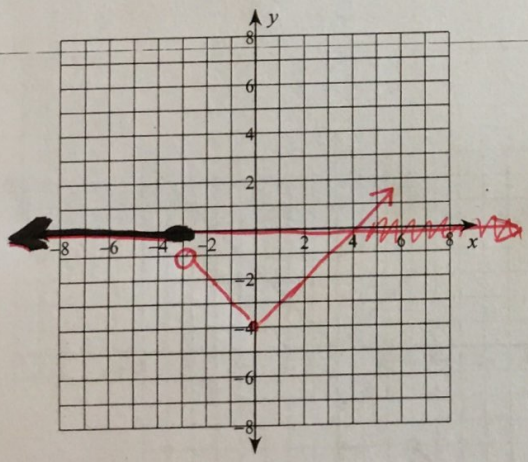
1) $f(x) = \begin{cases} -2x - 3, & x < -1 \\ |x|, & -1 \le x < 4 \\ -x, & x \ge 4 \end{cases}$



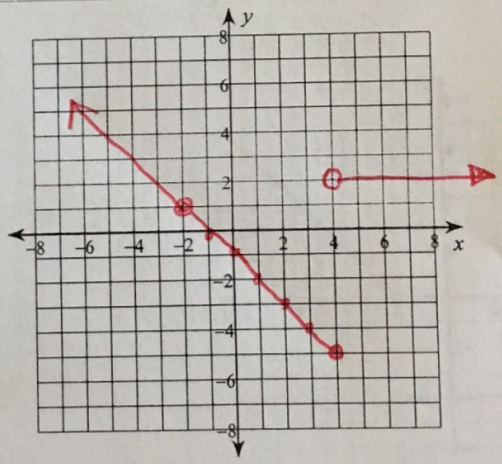
2) $f(x) = \begin{cases} 6, & x < -2 \\ 5, & -2 \le x \le 4 \\ |x|, & x > 4 \end{cases}$



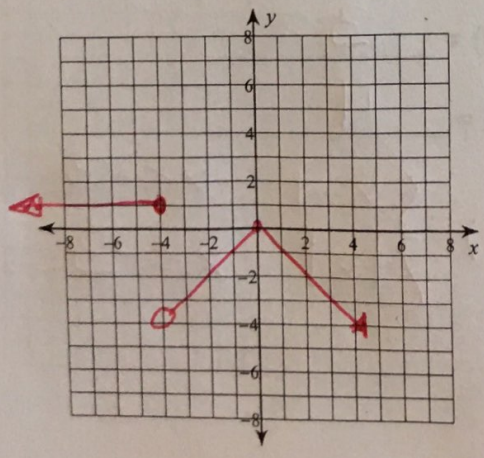
3) $g(x) = \begin{cases} 0, & x \le -3 \\ |x| - 4, & x > -3 \end{cases}$



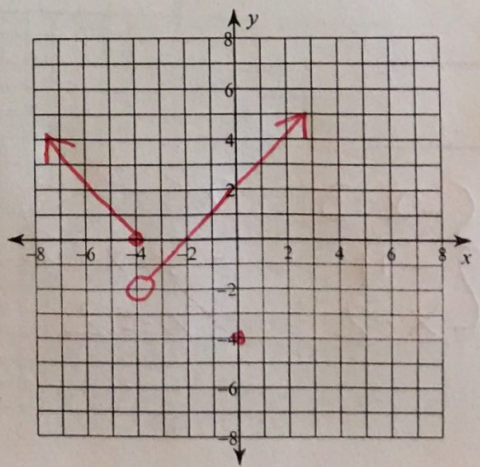
4) $f(x) = \begin{cases} |x| - 1, & x \le -2 \\ -x - 1, & -2 < x \le 4 \\ 2, & x > 4 \end{cases}$



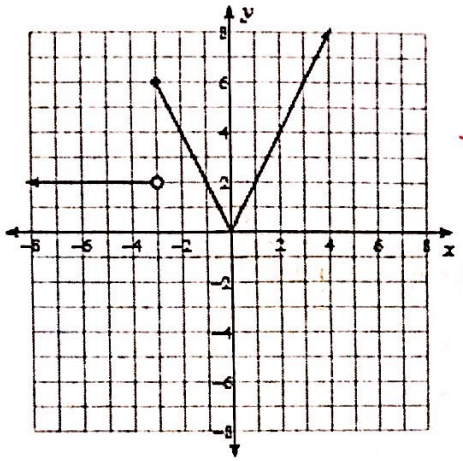
5) $h(x) = \begin{cases} 1, & x \le -4 \\ -|x|, & x > -4 \end{cases}$



6) $g(x) = \begin{cases} -x - 4, & x \le -4 \\ x + 2, & x > -4 \end{cases}$



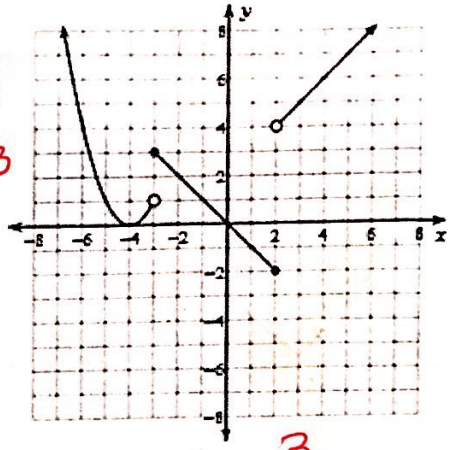
Write the piece wise function for each graph:



$$f(x)=\begin{cases}2 & x<-3\\ 2|x| & x\geq -3\end{cases}$$

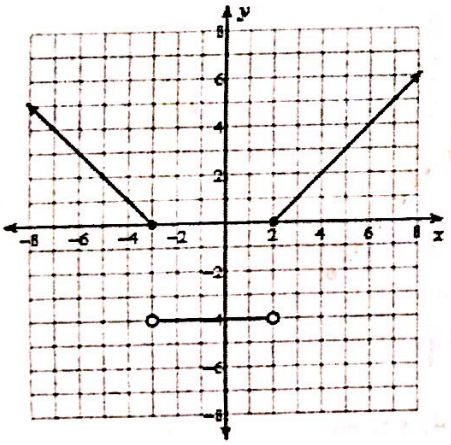
Find: f(0) = 0

f(-3) = 6



f(-3) = 3

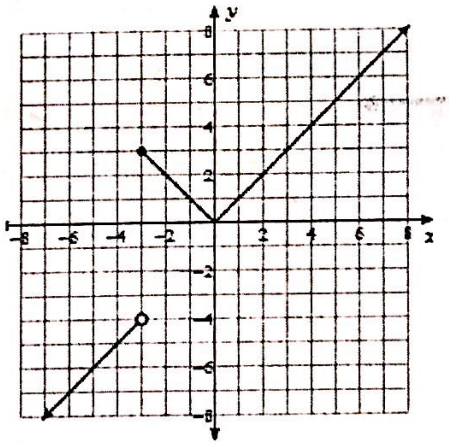
f(2) = -2



F(-3) = 0

F(0) = -4

$$f(x)=\begin{cases}-x-3 & x\leq -3\\ -4 & -3<x<2\\ x-2 & x\geq 2\end{cases}$$



f(-3) = 3

f(4) = 4

$$f(x)=\begin{cases}x-1 & x<-3\\ |x| & x\geq -3\end{cases}$$