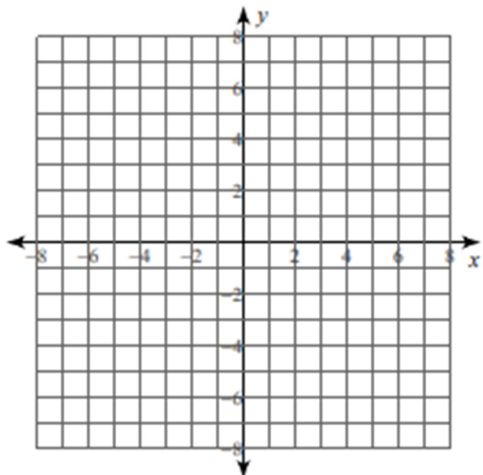
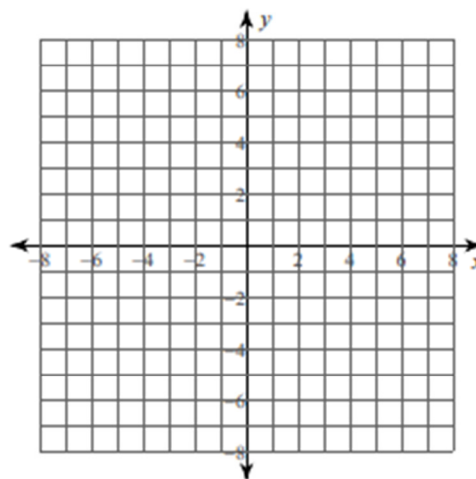


Sketch the graph of each function.

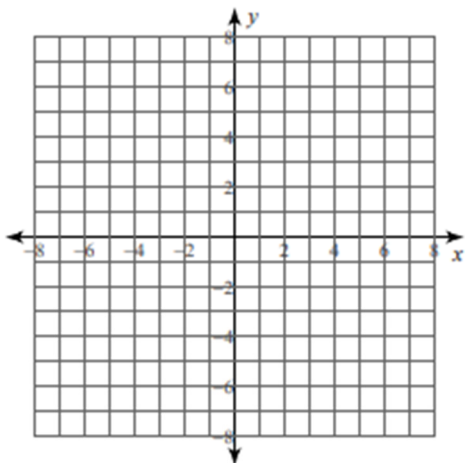
$$1) f(x) = \begin{cases} -2x - 1, & x \leq 2 \\ -x + 4, & x > 2 \end{cases}$$



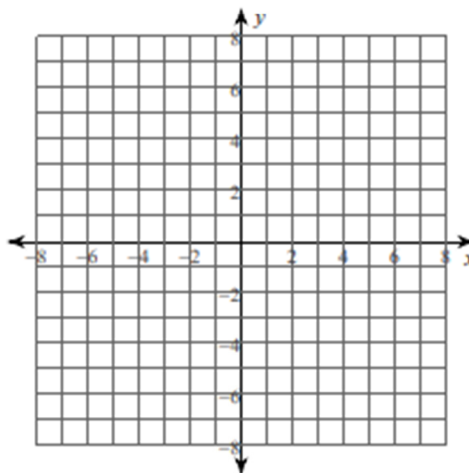
$$2) f(x) = \begin{cases} -4, & x \leq -2 \\ x - 2, & -2 < x < 2 \\ -2x + 4, & x \geq 2 \end{cases}$$



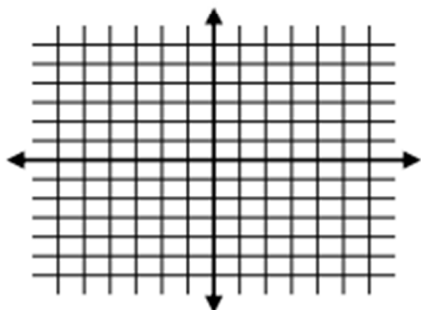
$$3) f(x) = \begin{cases} -2^x, & x < -4 \\ -|x|, & -4 \leq x \leq 0 \\ 4 - x^2, & x > 0 \end{cases}$$



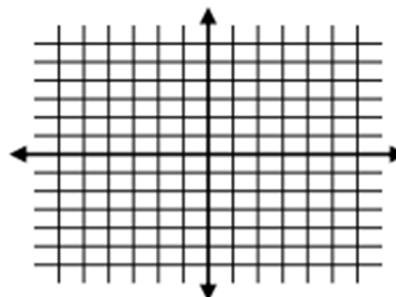
$$5) f(x) = \begin{cases} \frac{1}{x-4}, & x \leq 4 \\ -4, & x > 4 \end{cases}$$



$$5) f(x) = \begin{cases} x + 3, & \text{if } x \leq 0 \\ 2x, & \text{if } x > 0 \end{cases}$$

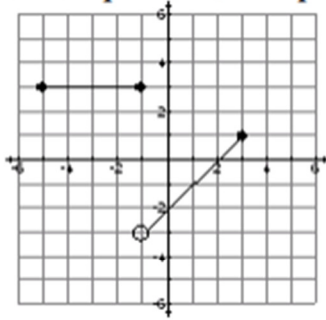


$$6) f(x) = \begin{cases} x + 1, & \text{if } x < 0 \\ -x + 1, & \text{if } 0 \leq x \leq 2 \\ x - 1, & \text{if } x > 2 \end{cases}$$

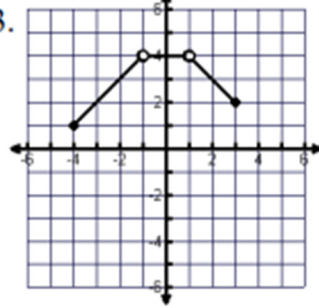


Write the equation of the piecewise functions below.

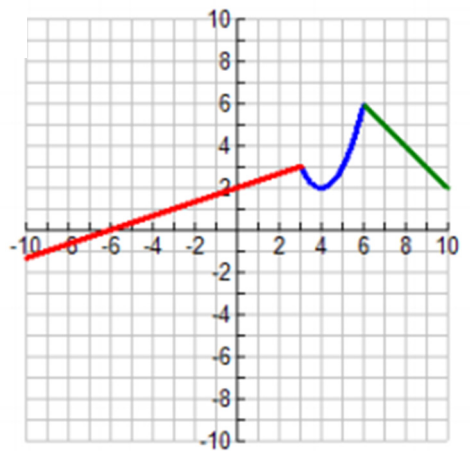
22.



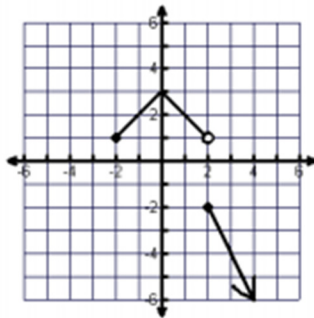
23.



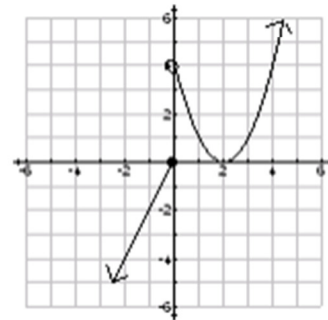
24.



25.

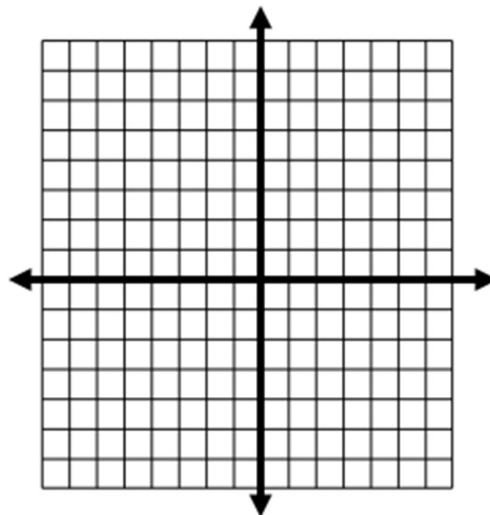


26.



27. Graph the function below.

$$f(x) = \begin{cases} x^2 - 1 & x \leq 0 \\ 2x - 1 & 0 < x \leq 5 \\ 3 & x > 5 \end{cases}$$



28.

$$f(x) = \begin{cases} -(x+3)^2 + 5 & x \leq -3 \\ -\frac{1}{3}x + 4 & -3 < x \leq 3 \\ |x| & x > 3 \end{cases}$$

