

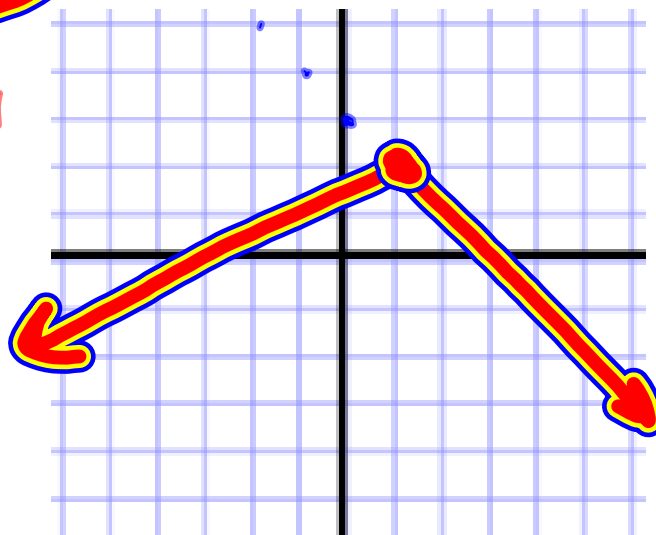
## GRAPHING Piecewise Functions

Graph this function:

$$f(x) = \begin{cases} \frac{1}{2}x + \frac{3}{2}, & x < 1 \\ -x + 3, & x \geq 1 \end{cases}$$

$$y = \frac{1}{2}x + \frac{3}{2} ; x < 1$$

$$y = -x + 3 ; x \geq 1$$

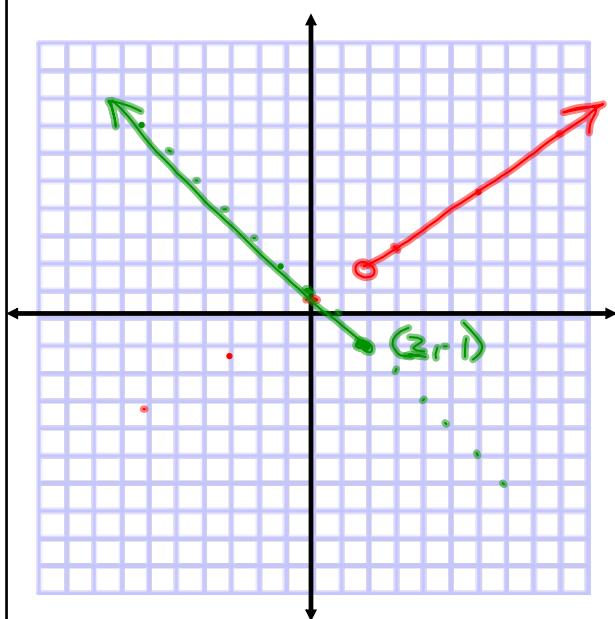


Graph this function:

$$f(x) = \begin{cases} \frac{2}{3}x + \frac{2}{3}, & \text{if } x > 2 \\ -x + 1, & \text{if } x \leq 2 \end{cases}$$

$$y = \frac{2}{3}x + \frac{2}{3}$$

$$y = -x + 1$$



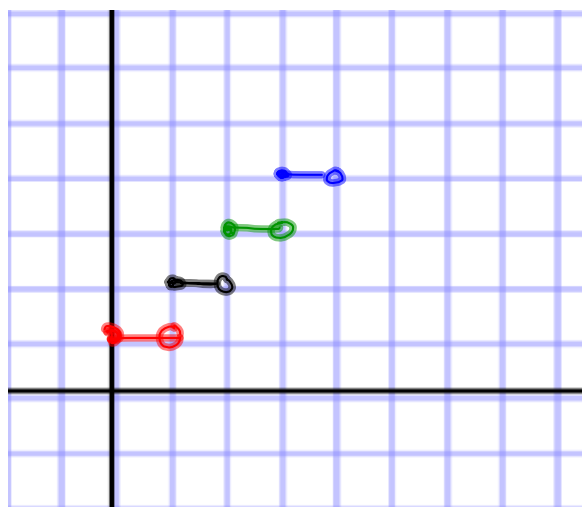
Graph this functions:  $f(x) = 1$ , if  $0 \leq x < 1$   
 $2$ , if  $1 \leq x < 2$   
 $3$ , if  $2 \leq x < 3$   
 $4$ , if  $3 \leq x < 4$

$$y = 1$$

$$y = 2$$

$$y = 3$$

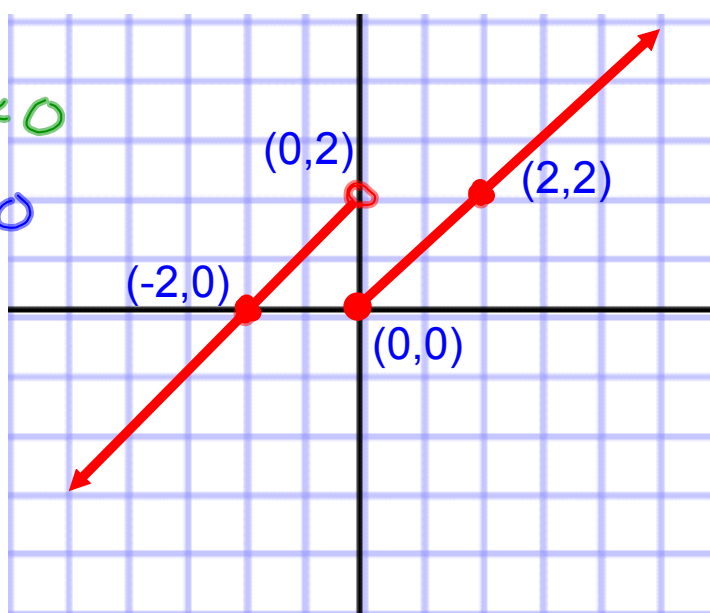
$$y = 4$$



## Writing Equations for Piecewise Functions

Write equations for the piecewise function whose graph is shown.

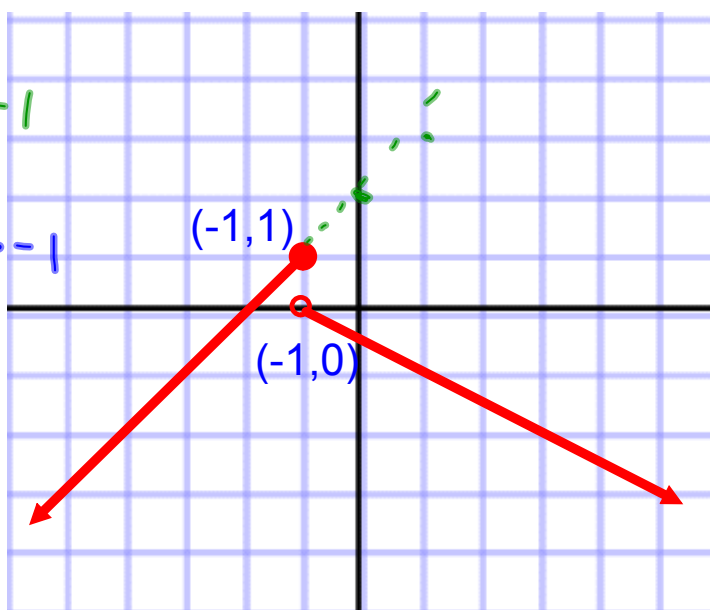
$$f(x) = \begin{cases} x + 2 & ; x < 0 \\ x & ; x \geq 0 \end{cases}$$



## Writing Equations for Piecewise Functions

Write equations for the piecewise function whose graph is shown.

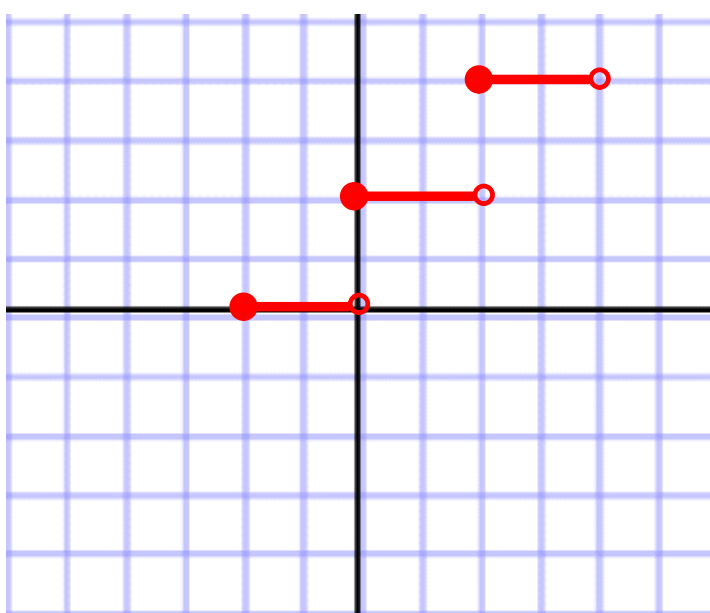
$$f(x) = \begin{cases} x+2; & x \leq -1 \\ -\frac{1}{2}x - \frac{1}{2}; & x > -1 \end{cases}$$



## Writing Equations for Piecewise Functions

Write equations for the piecewise function whose graph is shown.

$$f(x) = \begin{cases} 0 \\ 2 \\ 4 \end{cases}$$



Assignment:

p. 118

# 22-40 Even