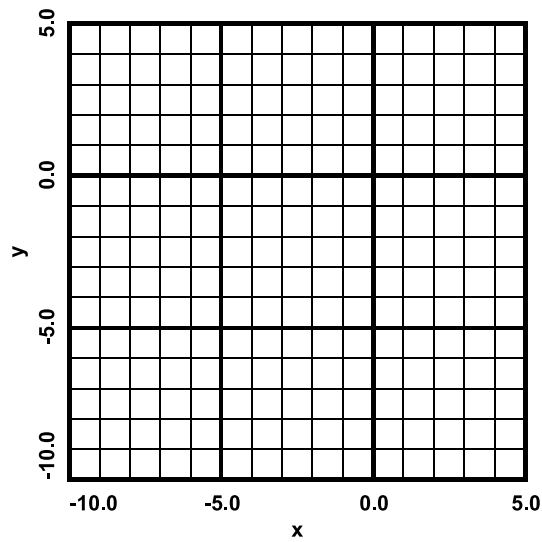


- 1) Graph  $y + 4 = 3|x + 2|$  on the grid below.



- 2) By looking at the graph in problem 1, convert  $y + 4 = 3|x + 2|$  into a piecewise-defined function containing no absolute values.

- 3) Algebraically, convert  $y + 5 = 2|x - 3|$  to a piecewise-defined function containing no absolute values.

- 4) For the function in problem 3, calculate the average rate of change of  $y$  with respect to  $x$  on the interval  $-2 \leq x \leq 5$ .

- 5) Algebraically, convert

$$y = \begin{cases} -\frac{2}{3}x + 6 & , \quad x \leq 3 \\ \frac{2}{3}x + 2 & , \quad x > 3 \end{cases}$$

to an absolute value function.