

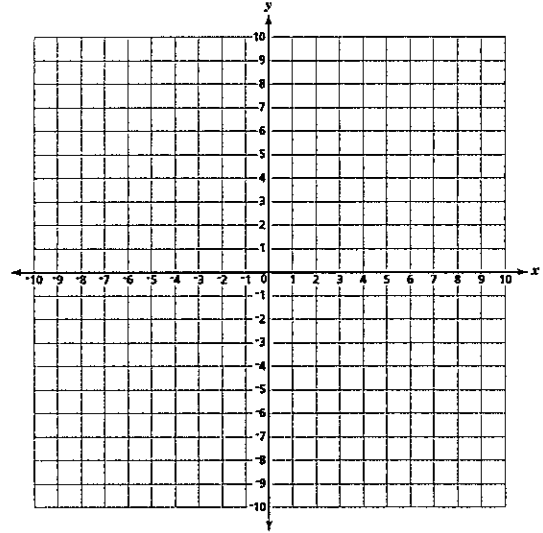
Name \_\_\_\_\_  
8A; Algebra 1

Date \_\_\_\_\_  
Period \_\_\_\_\_

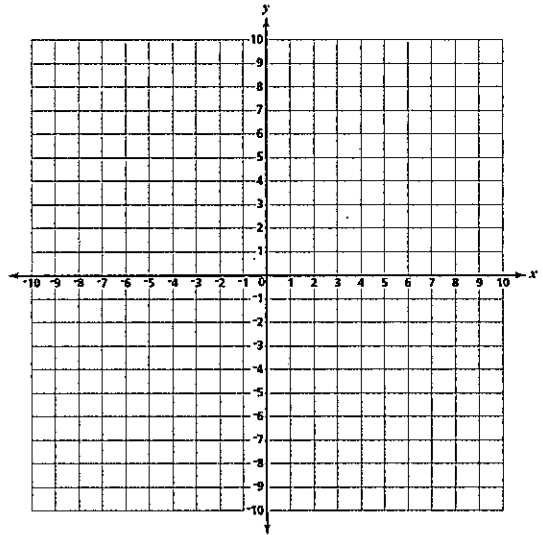
### Homework

#'s 1 -4: Graph the following step functions

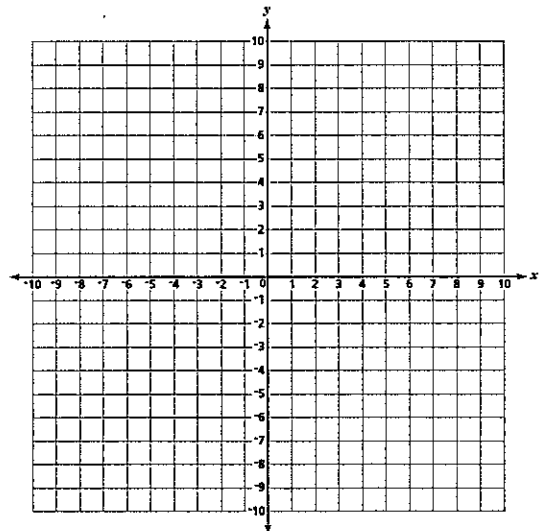
$$1. f(x) = \begin{cases} 3, & \text{if } -1 \leq x < 2 \\ 5, & \text{if } 2 \leq x < 4 \\ 8, & \text{if } 4 \leq x < 6 \\ 10, & \text{if } 6 \leq x < 10 \end{cases}$$



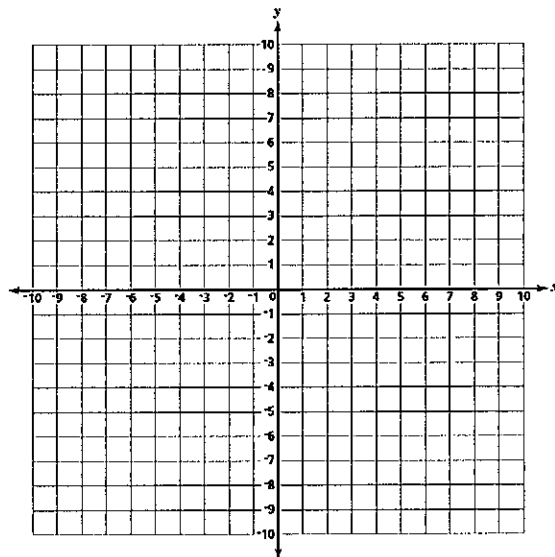
$$2. f(x) = \begin{cases} -1, & \text{if } 0 \leq x < 1 \\ -3, & \text{if } 1 \leq x < 2 \\ -5, & \text{if } 2 \leq x < 3 \\ -7, & \text{if } 3 \leq x < 4 \\ -9, & \text{if } 4 \leq x < 5 \end{cases}$$



$$3. f(x) = \begin{cases} x+2, & \text{if } x < 0 \\ 2x+5, & \text{if } 0 \leq x \leq 2 \\ -x+1, & \text{if } x > 2 \end{cases}$$



4. 
$$f(x) = \begin{cases} 2x - 4, & \text{if } x < 0 \\ 1, & \text{if } 0 \leq x < 3 \\ \frac{1}{3}x + 3, & \text{if } x \geq 3 \end{cases}$$



#'s 5 - 6: Write the equations for the piecewise functions below.

