

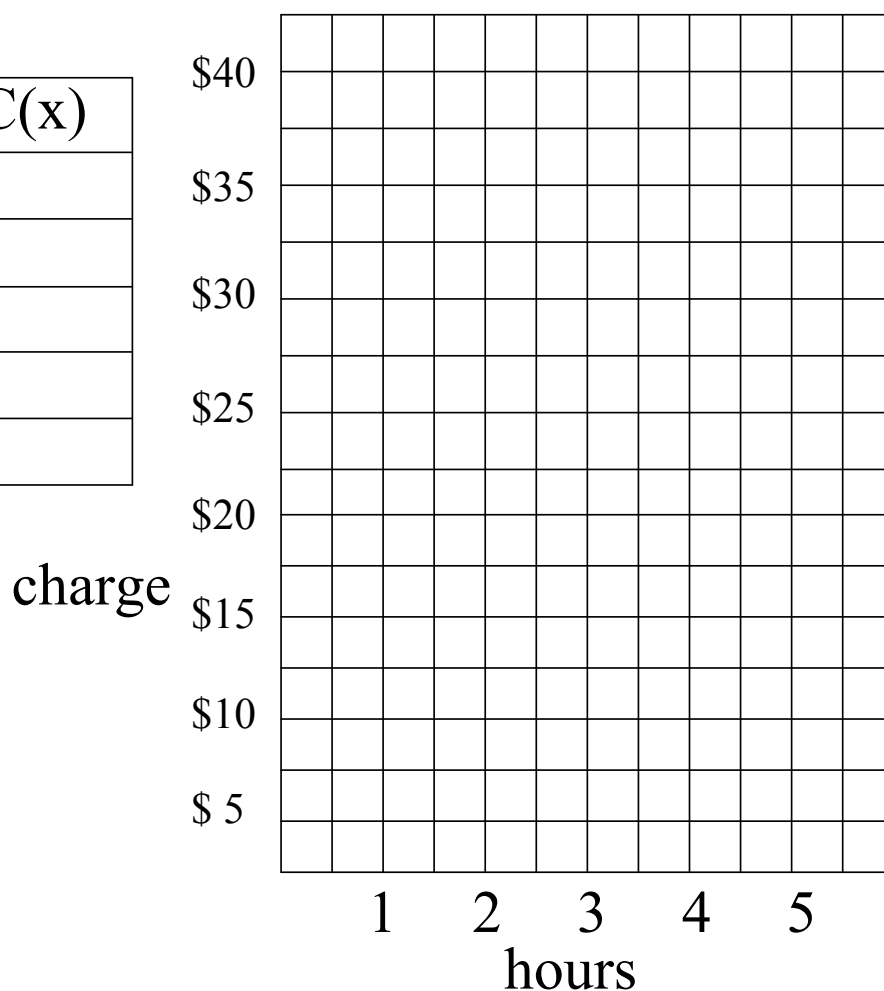
Greatest Integer Funcons

also called linear piecewise or step functions

Problem: Suppose a parking garage charges customers \$7.50 per hour, or any fraction thereof.

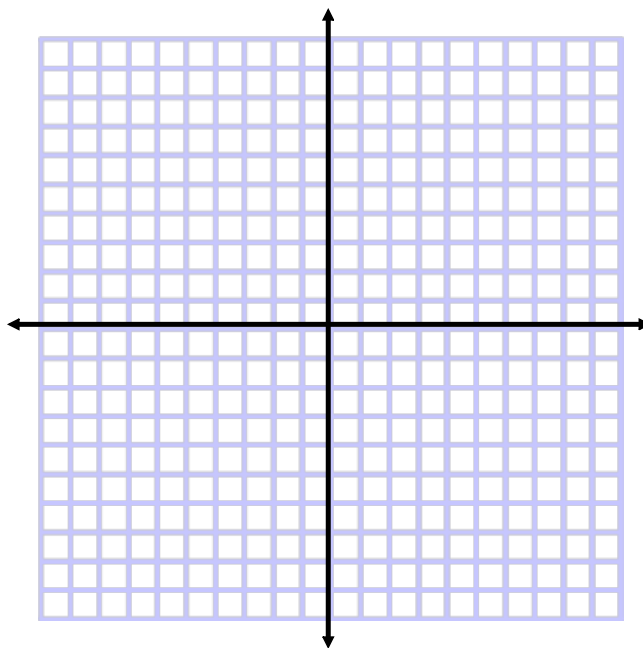
Draw a graph of this situation.

x	C(x)

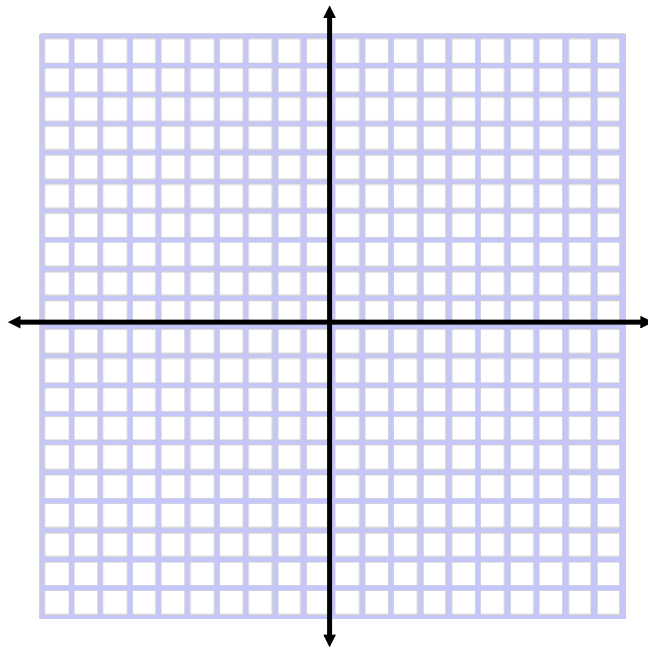


step function notation: $[[\quad]]$

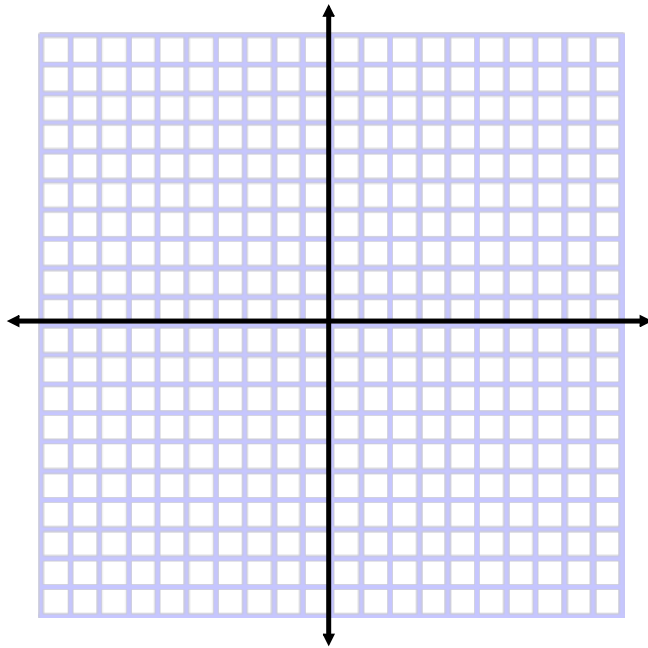
$$f(x) = [[x]]$$



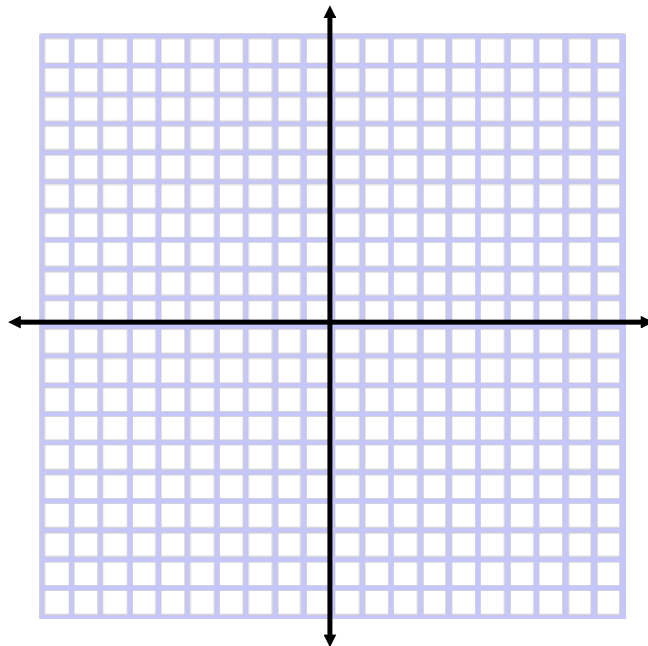
$$f(x) = \lfloor x \rfloor$$



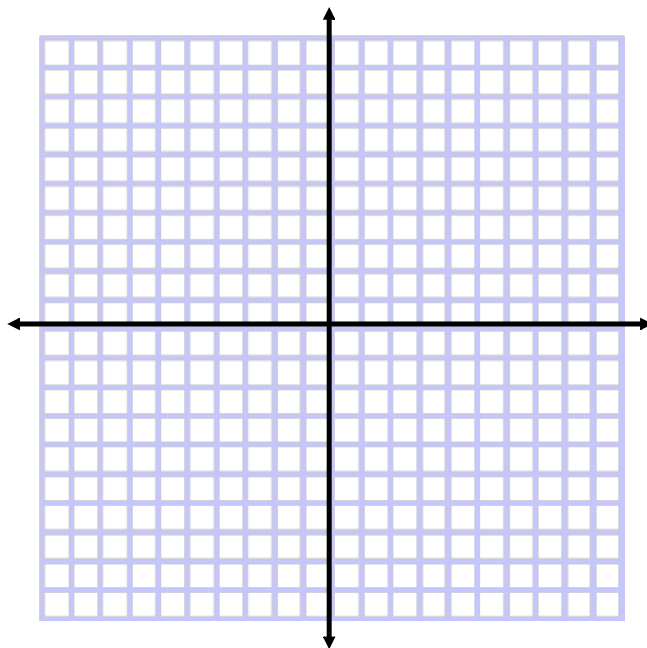
$$f(x) = \lceil x - 5 \rceil$$



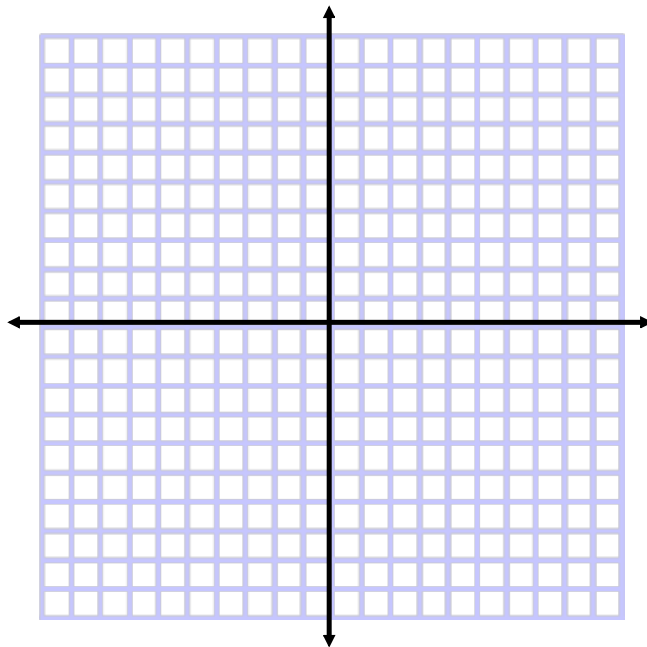
$$f(x) = \lceil x \rceil - 3$$



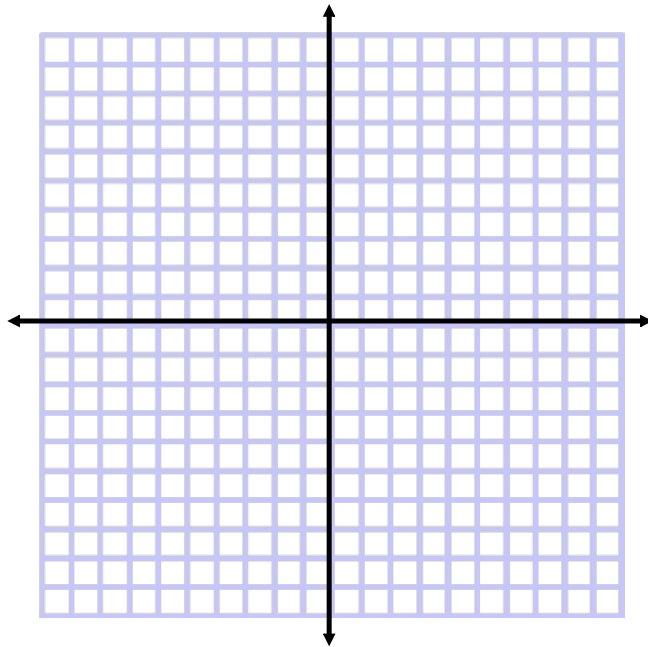
$$f(x) = 2[[x]]$$



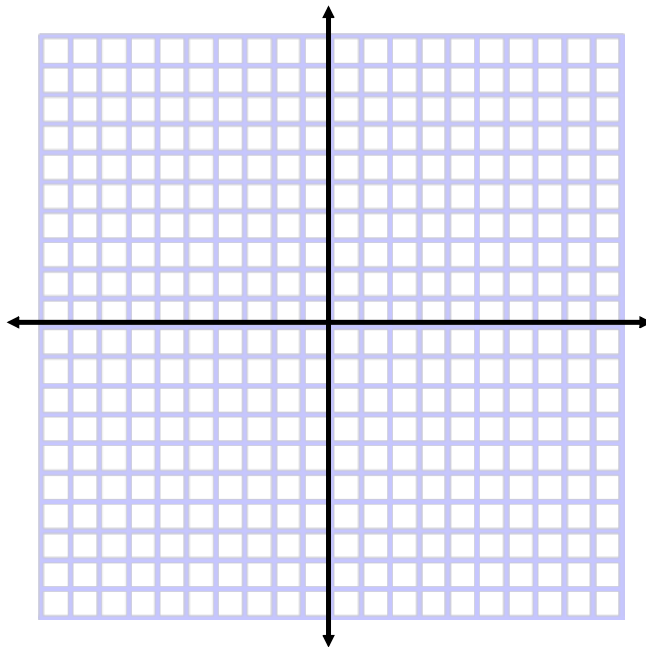
$$f(x) = \lfloor \lfloor 1/2x \rfloor \rfloor$$



$$f(x) = \lfloor \frac{1}{2}x - 3 \rfloor$$



$$f(x) = -\lceil x \rceil$$



$$f(x) = -\frac{1}{2} \llbracket x+1 \rrbracket$$

