NAME _____ DATE _____ PERIOD _____

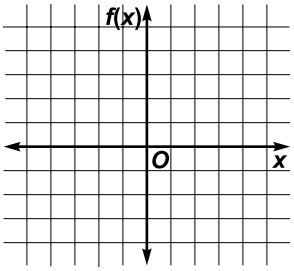
1-7

Practice

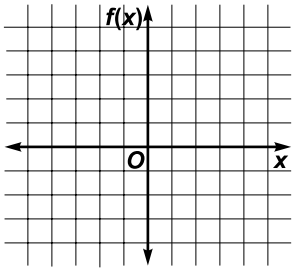
Piecewise Functions

Graph each function.

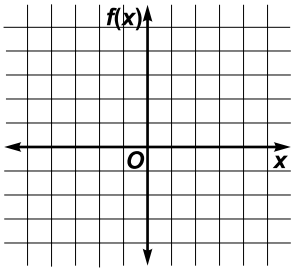
1. $f(x) = \begin{cases} 1 \text{ if } x \geq 2 \\ x \text{ if } -1 \leq x < 2 \\ -x - 3 \text{ if } x < -2 \end{cases}$



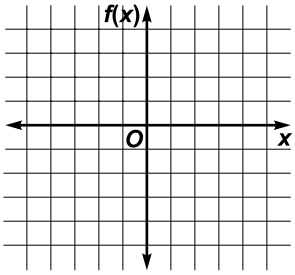
2. $f(x) = \begin{cases} -2 \text{ if } x \leq -1 \\ 1 + x \text{ if } -1 < x < 2 \\ 1 - x \text{ if } x > 2 \end{cases}$



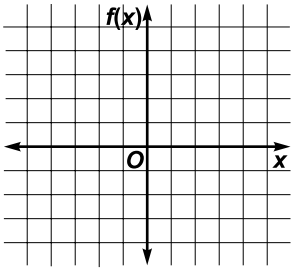
3. $f(x) = |x| - 3$



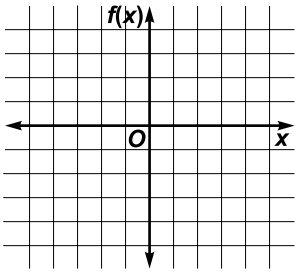
4. $f(x) = [\![x]\!] - 1$



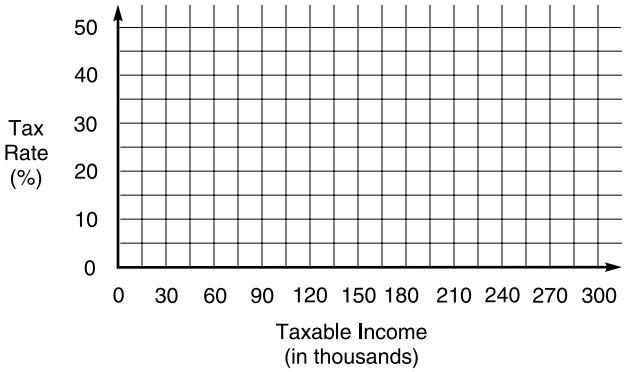
5. $f(x) = 3|x| - 2$



6. $f(x) = [\![2x + 1]\!]$



7. Graph the tax rates for the different incomes by using a step function.

Income Tax Rates for a Couple Filing Jointly	
Limits of Taxable Income	**Tax Rate**
\$0 to \$41,200	15%
\$41,201 to \$99,600	28%
\$99,601 to \$151,750	31%
\$151,751 to \$271,050	36%
\$271,051 and up	39.6%

Source: Information Please Almanac