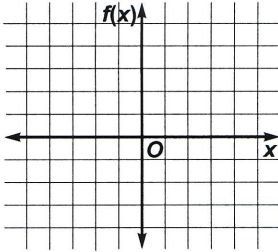


Practice

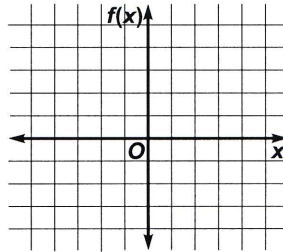
Piecewise Functions

Graph each function.

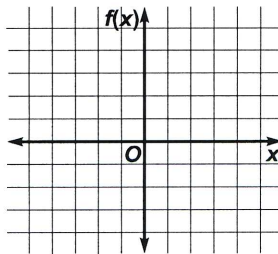
$$1. f(x) = \begin{cases} 1 & \text{if } x \geq 2 \\ x & \text{if } -1 \leq x < 2 \\ -x - 3 & \text{if } x < -2 \end{cases}$$



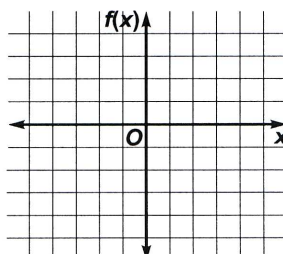
$$2. f(x) = \begin{cases} -2 & \text{if } x \leq -1 \\ 1 + x & \text{if } -1 < x < 2 \\ 1 - x & \text{if } x > 2 \end{cases}$$



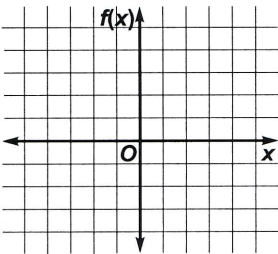
$$3. f(x) = |x| - 3$$



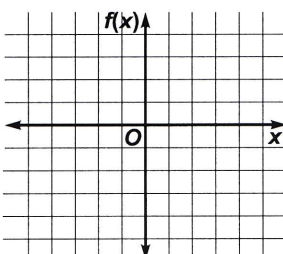
$$4. f(x) = \llbracket x \rrbracket - 1$$



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



$$6. f(x) = \llbracket 2x + 1 \rrbracket$$



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

