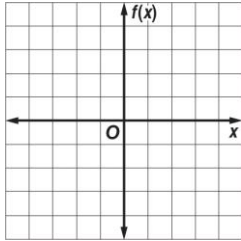


3-7 Practice

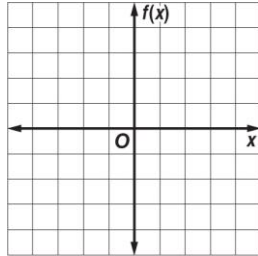
Piecewise and Step Functions

Graph each function. State the domain and range.

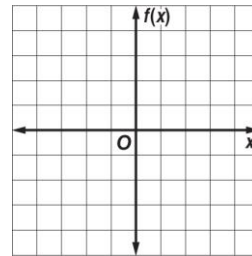
1. $f(x) = -2 \llbracket x + 1 \rrbracket$



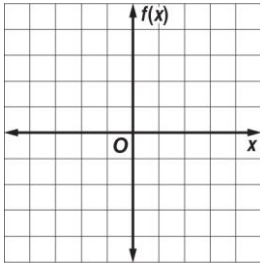
2. $f(x) = \llbracket x + 3 \rrbracket - 2$



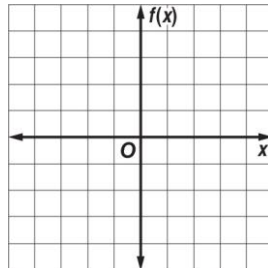
3. $f(x) = \begin{cases} \frac{1}{2}x - 4 & \text{if } x > 0 \\ -x - 1 & \text{if } x \leq 0 \end{cases}$



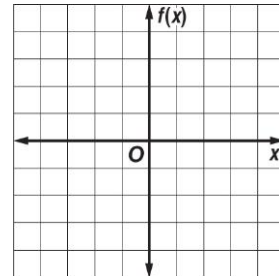
4. $f(x) = \begin{cases} 2x - 1 & \text{if } x \geq -2 \\ -1 & \text{if } x < -2 \end{cases} - 3$



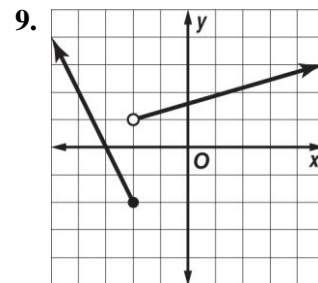
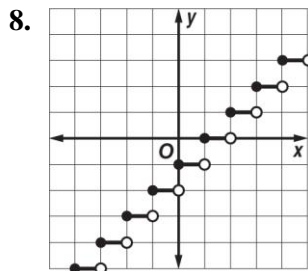
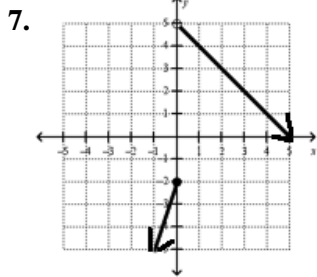
5. $f(x) = \begin{cases} 2 & \text{if } x > -1 \\ x + 4 & \text{if } x \leq -1 \end{cases}$



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



Determine the domain and range of each function.



10. **CELL PHONES** Jacob's cell phone service costs \$5 each month plus \$0.35 for each minute he uses. Every fraction of a minute is rounded up to the next minute.

- Draw a graph to represent the cost of using the cell phone.
- What is Jacob's monthly bill if he uses 124.8 minutes?

