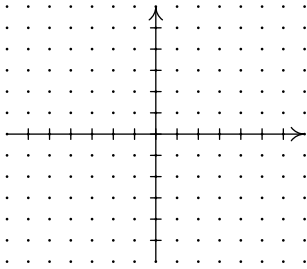


A piecewise function is defined as a series of line segments, rays, points, or other partial graphs. Each piece is graphed separately. For each of the following problems, graph the piecewise function, and define its domain and range.

$$1. y = \begin{cases} 3x - 2 & \text{if } 0 \leq x \leq 1 \\ -2x - 2 & \text{if } -2 \leq x < 0 \end{cases}$$

Domain: \_\_\_\_\_

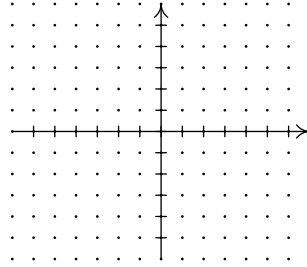
Range: \_\_\_\_\_



$$4. y = \begin{cases} \frac{x}{2} + 1 & \text{if } x > 2 \\ x + 2 & \text{if } -2 \leq x \leq 2 \end{cases}$$

Domain: \_\_\_\_\_

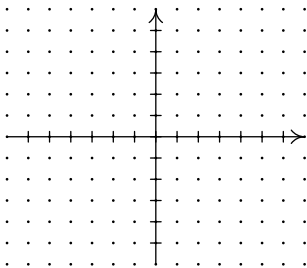
Range: \_\_\_\_\_



$$2. y = \begin{cases} \frac{5x}{2} + 4 & \text{if } -2 \leq x \leq 0 \\ 6x + 14 & \text{if } -3 \leq x < -2 \end{cases}$$

Domain: \_\_\_\_\_

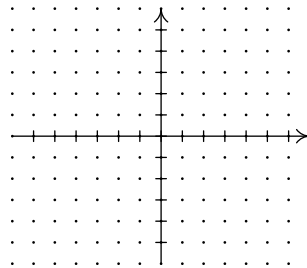
Range: \_\_\_\_\_



$$5. y = \begin{cases} -x + 3 & \text{if } x \geq 0 \\ x + 1 & \text{if } x < 0 \end{cases}$$

Domain: \_\_\_\_\_

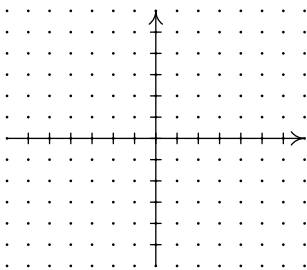
Range: \_\_\_\_\_



$$3. y = \begin{cases} -x + 2 & \text{if } -2 < x \leq 1 \\ -\frac{5x}{2} - 7 & \text{if } -4 < x \leq -2 \end{cases}$$

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



$$6. y = \begin{cases} 4 & \text{if } -4 \leq x < 2 \\ 4 & \text{if } x = 2 \end{cases}$$

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

