Graph the following on the grids provided. State the range.

1) $k(x) = \begin{cases} 1-x, & \text{if } x < 1 \\ x^2 & \text{if } x \geq 1 \end{cases}$
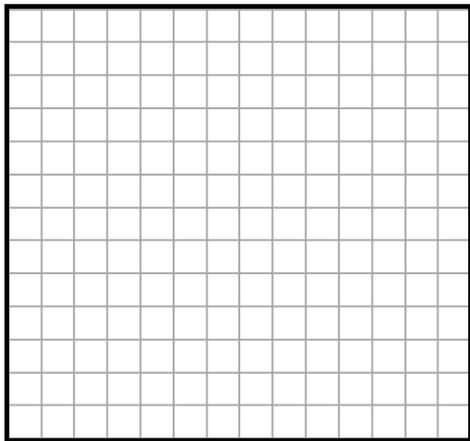
**2)** $m(x) = \begin{cases} -2x-4, & \text{if } x < -3 \\ x^2 - 2, & \text{if } -3 \leq x < 2 \\ 3 & \text{if } x > 2 \end{cases}$
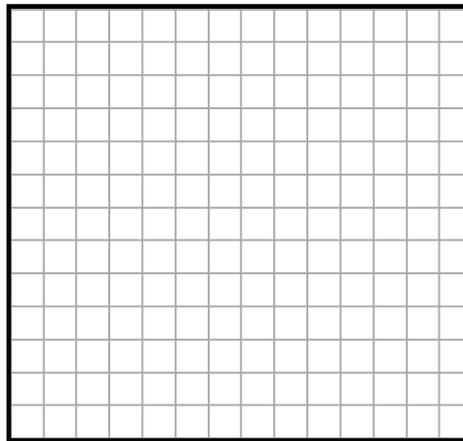
3) $f(x) = \begin{cases} x+4 & \text{if } x < 2 \\ 3 & \text{if } 2 \leq x < 5 \\ -6+x & \text{if } x \geq 5 \end{cases}$
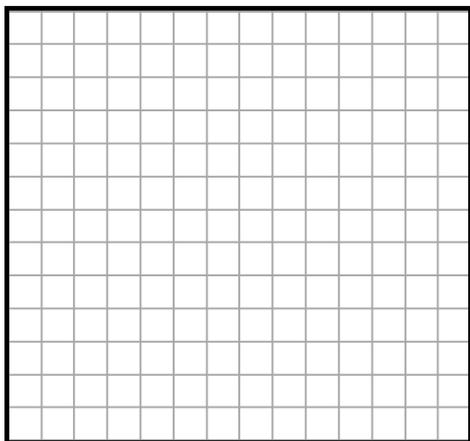
4) $f(x) = \begin{cases} 3x+3 & \text{if } x < 0 \\ x^2 + 1 & \text{if } x \geq 0 \end{cases}$
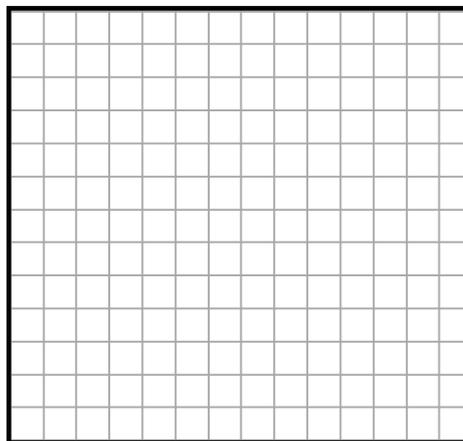
continued...

5) Write the symbolic piecewise function for the following graph:

y (1, 3)

1

−1 1 x
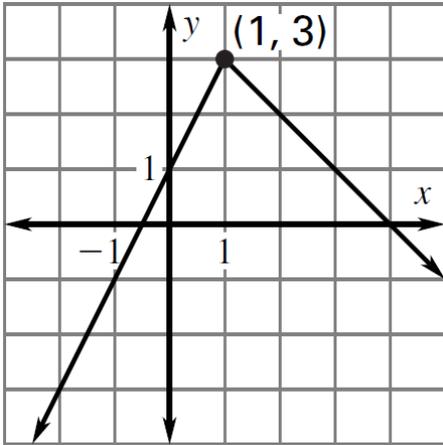
6) Write the symbolic piecewise function for the given graph.

y

(−3, 3)

1

−1 x

−1

(−3, −1)