

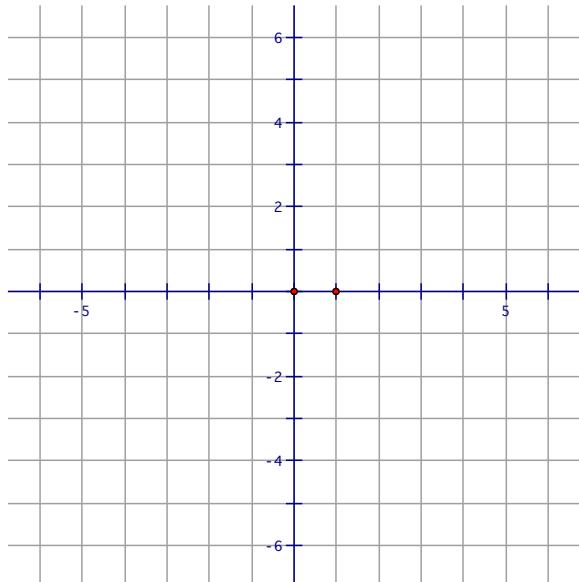
Homework – Piecewise Defined Functions

For each piecewise equation:

- Graph.
- State the domain and range using correct interval notation.
- Determine if the equation is a function.

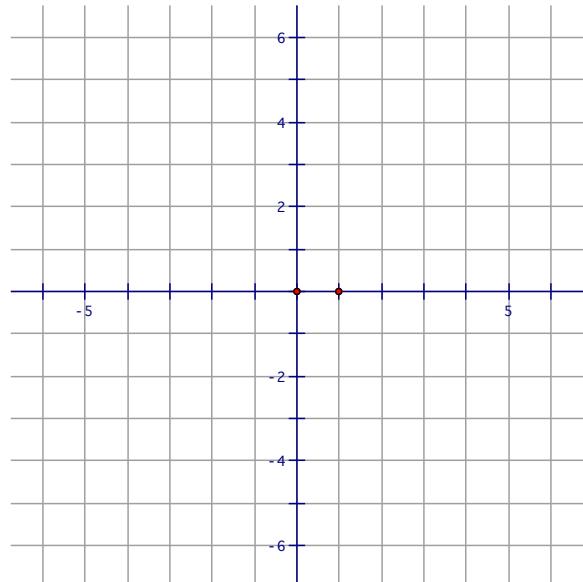
#1)

$$y = \begin{cases} 2x + 4 & \text{for } x < -1 \\ 1 & \text{for } -1 \leq x \leq 2 \\ 2x - 2 & \text{for } x \geq 2 \end{cases}$$



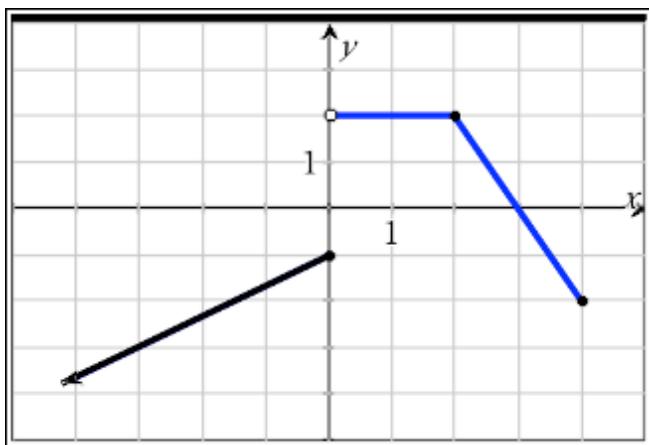
#2)

$$y = \begin{cases} 1 & \text{for } -5 \leq x < -3 \\ x + 4 & \text{for } -3 \leq x < -1 \\ -3x & \text{for } -1 < x < 0 \\ \frac{1}{3}x & \text{for } 0 \leq x < 3 \end{cases}$$

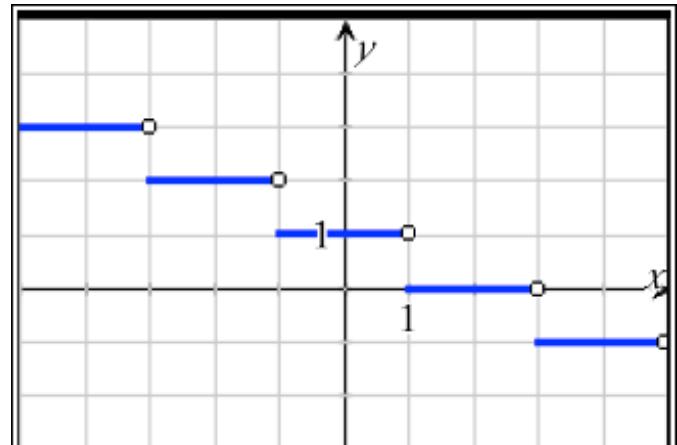


Write the piecewise equation. State the range and domain.

#3)



#4)



#5) Write the piecewise equation two ways.

- 1) Using linear functions
- 2) using absolute value functions.

