6. \( y' = -2 + x - y \)
   \[ \text{let } y' = 0: \quad 0 = -2 + x - y \]
   \[ y = x - 2 \]
   \[ \text{let } y' = 1: \quad 1 = -2 + x - y \]
   \[ y = x - 3 \]
   \[ \text{let } y' = 2: \quad 2 = -2 + x - y \]
   \[ y = x - 4 \]
   \[ \text{let } y' = -2: \quad -2 = -2 + x - y \]
   \[ y = x \]
   \[ \text{let } y' = -1: \quad -1 = -2 + x - y \]
   \[ y = x - 1 \]

7. \[ \begin{array}{ccc}
      x & \text{abscissa} & y \\
      -5 & 0 & 5 & 8
    \end{array} \]

a. must (interval is at least (-5,5))
b. must ("")
c. may (perhaps the interval is (-5,5))
d. may (-5 could be the end point)
e. never (the largest the interval can be is (-5,5))
f. may (the interval could be [-5,5])