

FUNCIONES DEFINIDAS A TROZOS

1) Representa gráficamente las siguientes funciones:

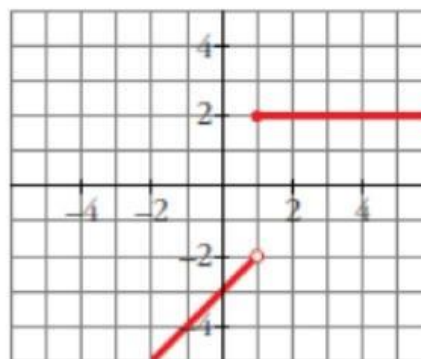
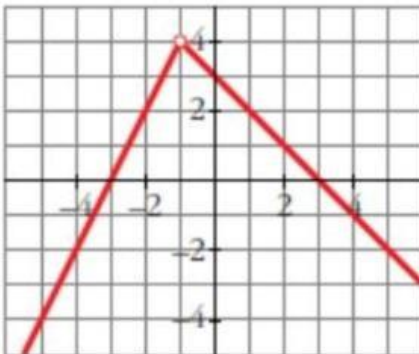
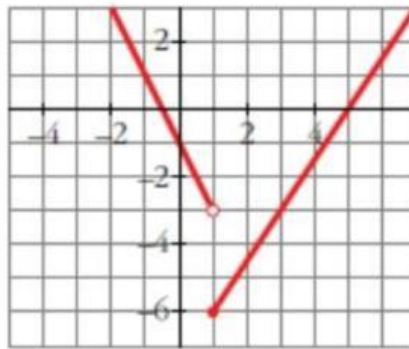
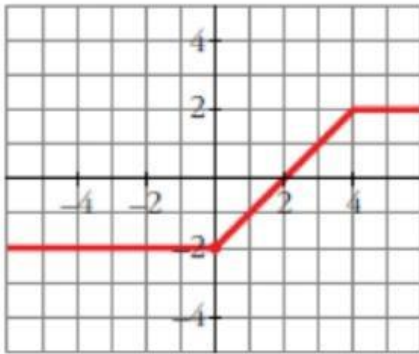
$$\text{a) } y = \begin{cases} x - 3 & \text{si } x < 1 \\ 2 & \text{si } x \geq 1 \end{cases}$$

$$\text{b) } y = \begin{cases} -2 & \text{si } x < 0 \\ x - 2 & \text{si } 0 \leq x < 4 \\ 2 & \text{si } x \geq 4 \end{cases}$$

$$\text{c) } y = \begin{cases} -2x - 1 & \text{si } x < 1 \\ (3x - 15)/2 & \text{si } x \geq 1 \end{cases}$$

$$\text{d) } y = \begin{cases} 2x + 6 & \text{si } x < -1 \\ -x + 3 & \text{si } x \geq -1 \end{cases}$$

Solución:



2)

Representa:

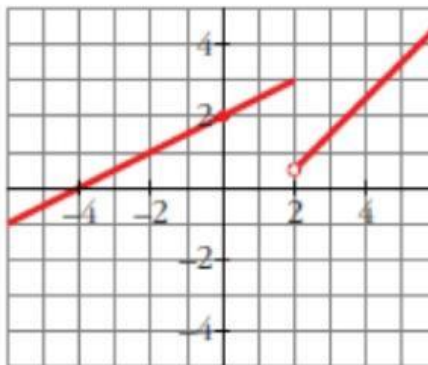
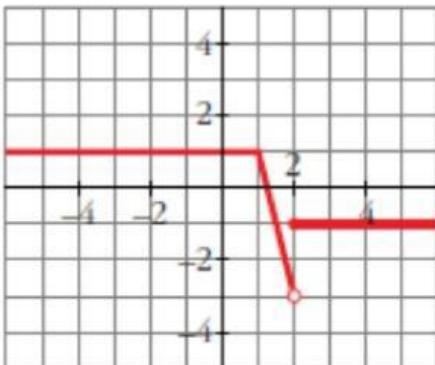
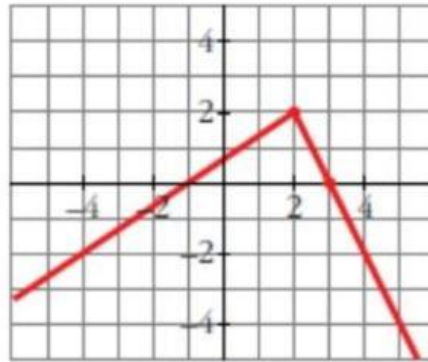
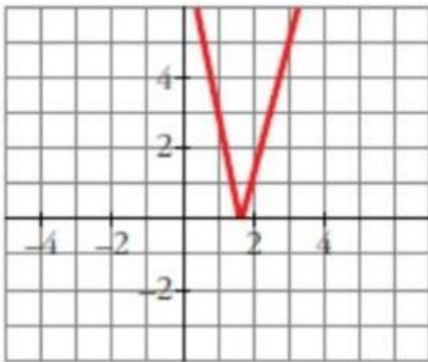
$$\text{a) } y = \begin{cases} x/2 + 2 & \text{si } x \leq 2 \\ x - 3/2 & \text{si } x > 2 \end{cases}$$

$$\text{b) } y = \begin{cases} (2x + 2)/3 & \text{si } x < 2 \\ -2x + 6 & \text{si } x \geq 2 \end{cases}$$

$$\text{c) } y = \begin{cases} -4x + 7 & \text{si } x < 1,75 \\ 4x - 7 & \text{si } x \geq 1,75 \end{cases}$$

$$\text{d) } y = \begin{cases} 1 & \text{si } x \leq 1 \\ -4x + 5 & \text{si } 1 < x < 2 \\ -1 & \text{si } x \geq 2 \end{cases}$$

Solución:



3) Dibuja la gráfica de las siguientes funciones:

$$\text{a) } y = \begin{cases} x^2 & \text{si } x \leq 1 \\ (2x-1)/3 & \text{si } x > 1 \end{cases}$$

$$\text{b) } y = \begin{cases} x^2 - 2x & \text{si } x \leq 2 \\ 3 & \text{si } x > 2 \end{cases}$$

$$\text{c) } y = \begin{cases} -x^2 - 4x - 2 & \text{si } x < -1 \\ x^2 & \text{si } x \geq -1 \end{cases}$$

$$\text{d) } y = \begin{cases} -x^2 & \text{si } x < 0 \\ x^2 & \text{si } x \geq 0 \end{cases}$$

Solución:

