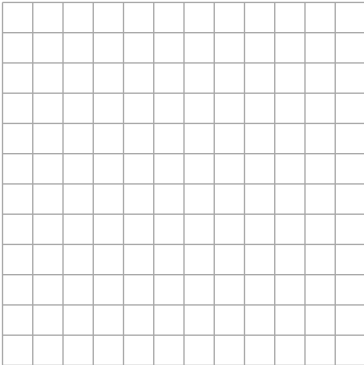




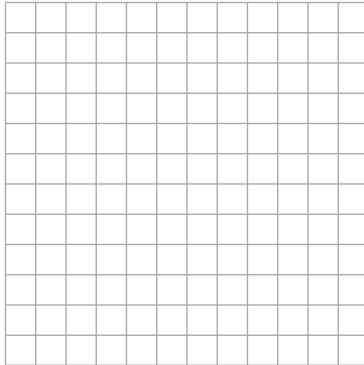
2. Refuerza: funciones definidas mediante dos o tres trozos

1 Representa las siguientes funciones definidas a trozos:

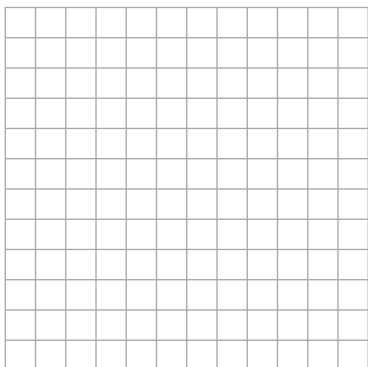
$$f(x) = \begin{cases} x & \text{si } x \leq 0 \\ -x & \text{si } x > 0 \end{cases}$$



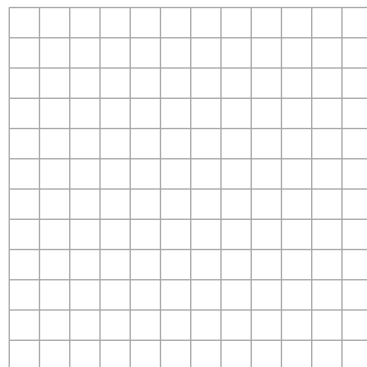
$$f(x) = \begin{cases} -2 & \text{si } x \leq 4 \\ 3 & \text{si } x > 4 \end{cases}$$



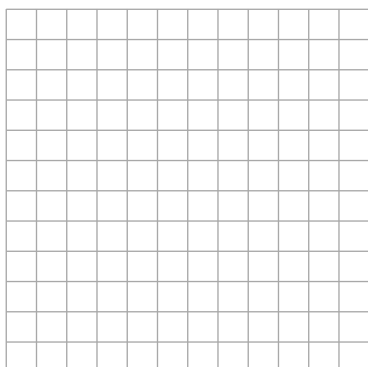
$$f(x) = \begin{cases} 4 & \text{si } x < 2 \\ 2x & \text{si } x \geq 2 \end{cases}$$



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



$$f(x) = \begin{cases} 2 & \text{si } x \leq 0 \\ 3x & \text{si } x > 0 \end{cases}$$

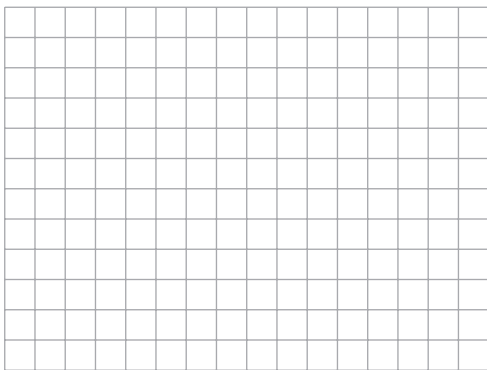




2. Refuerza: funciones definidas mediante dos o tres trozos

2 Representa las siguientes funciones e indica su dominio de definición:

$$f(x) = \begin{cases} 1 & \text{si } x \leq 3 \\ x - 2 & \text{si } 3 < x < 6 \\ 2x - 8 & \text{si } x \geq 6 \end{cases}$$



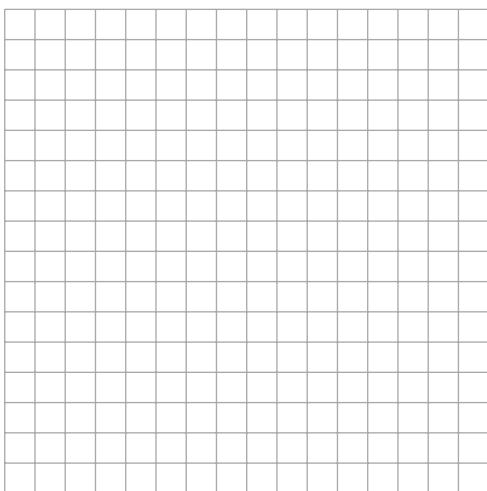
$Dom f(x) =$

$$f(x) = \begin{cases} x + 3 & \text{si } -4 < x \leq 0 \\ 3 & \text{si } 0 < x \leq 5 \\ \frac{1}{5}x + 2 & \text{si } x > 5 \end{cases}$$



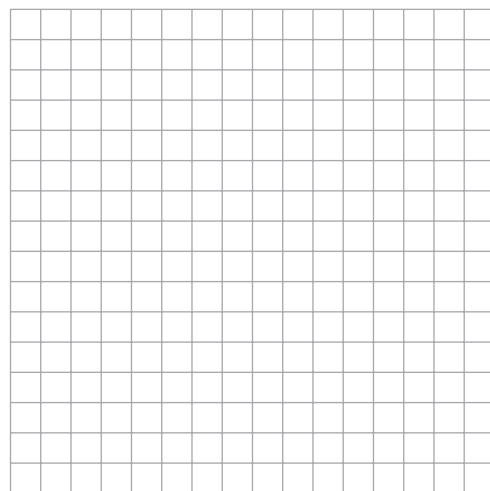
$Dom f(x) =$

$$f(x) = \begin{cases} 3x - 4 & \text{si } x < 3 \\ x + 5 & \text{si } 3 \leq x \leq 7 \\ 12 & \text{si } 7 < x < 10 \end{cases}$$



$Dom f(x) =$

$$f(x) = \begin{cases} 2 & \text{si } -3 \leq x < 1 \\ -2x + 3 & \text{si } 1 \leq x < 5 \\ -7 & \text{si } 5 \leq x < 8 \end{cases}$$



$Dom f(x) =$

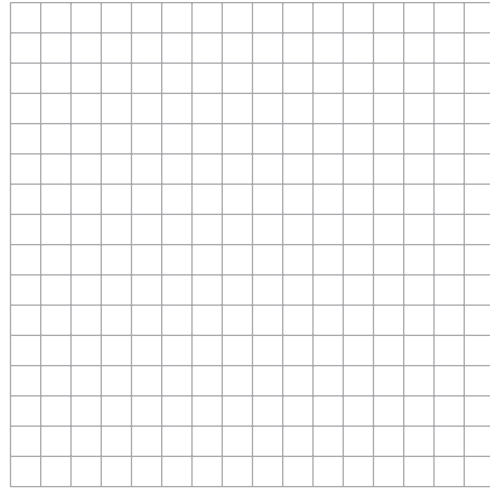
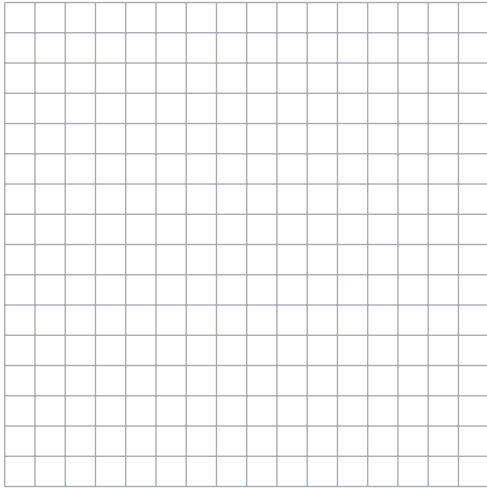


2. Refuerza: funciones definidas mediante dos o tres trozos

3 Representa las siguientes funciones, señala su dominio de definición y estudia su continuidad:

$$f(x) = \begin{cases} 1 + 2x & \text{si } x < -1 \\ 2x - 2 & \text{si } -1 \leq x < 3 \\ 4 & \text{si } x \geq 3 \end{cases}$$

$$f(x) = \begin{cases} -2x - 1 & \text{si } x \leq 1 \\ 3 & \text{si } 1 < x \leq 5 \end{cases}$$



$Dom f(x) =$

Es discontinua en .

$Dom f(x) =$

Es discontinua en .

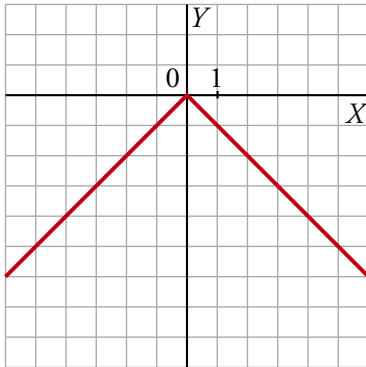


2. Refuerza: funciones definidas mediante dos o tres trozos

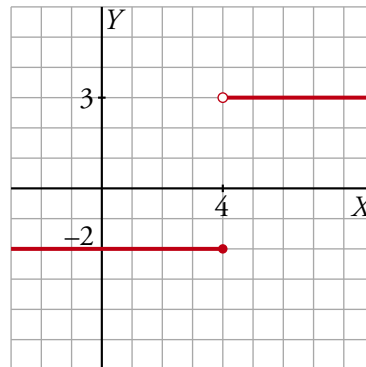
Soluciones

1 Representa las siguientes funciones definidas a trozos:

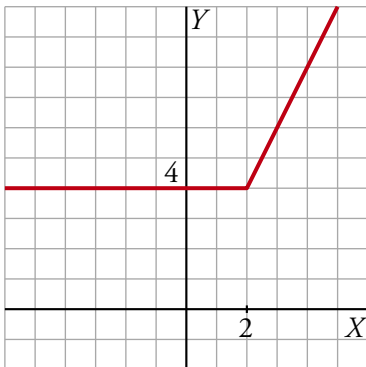
$$f(x) = \begin{cases} x & \text{si } x \leq 0 \\ -x & \text{si } x > 0 \end{cases}$$



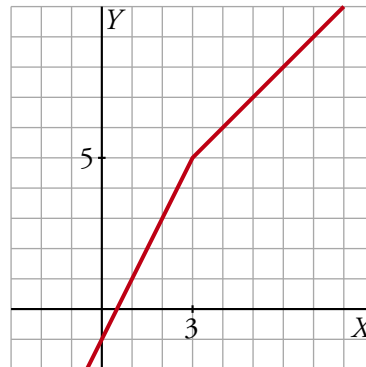
$$f(x) = \begin{cases} -2 & \text{si } x \leq 4 \\ 3 & \text{si } x > 4 \end{cases}$$



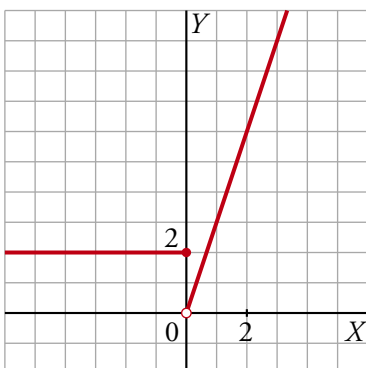
$$f(x) = \begin{cases} 4 & \text{si } x < 2 \\ 2x & \text{si } x \geq 2 \end{cases}$$



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



$$f(x) = \begin{cases} 2 & \text{si } x \leq 0 \\ 3x & \text{si } x > 0 \end{cases}$$



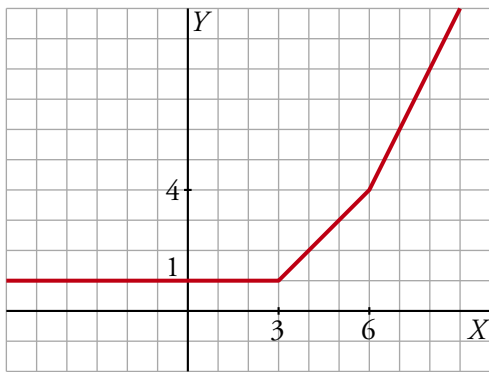


2. Refuerza: funciones definidas mediante dos o tres trozos

Soluciones

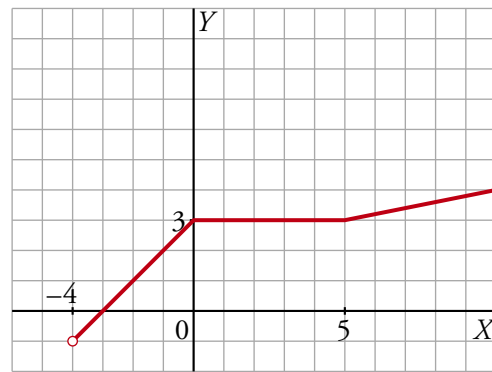
2 Representa las siguientes funciones e indica su dominio de definición:

$$f(x) = \begin{cases} 1 & \text{si } x \leq 3 \\ x - 2 & \text{si } 3 < x < 6 \\ 2x - 8 & \text{si } x \geq 6 \end{cases}$$



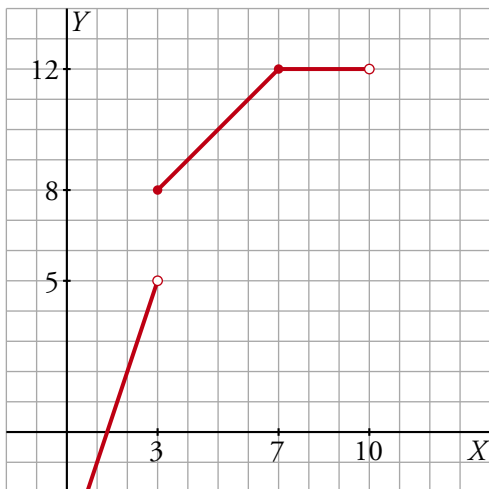
$$\text{Dom } f(x) = \boxed{\mathbb{R}}$$

$$f(x) = \begin{cases} x + 3 & \text{si } -4 < x \leq 0 \\ 3 & \text{si } 0 < x \leq 5 \\ \frac{1}{5}x + 2 & \text{si } x > 5 \end{cases}$$



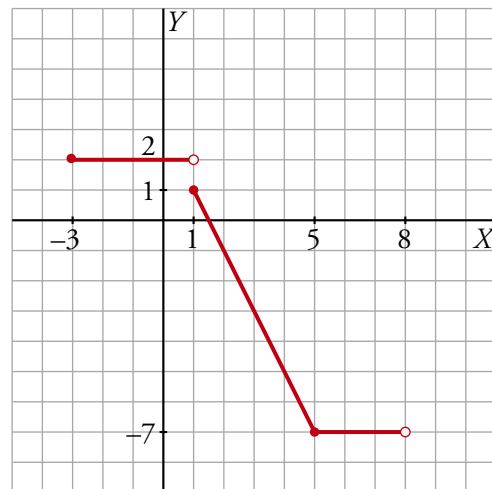
$$\text{Dom } f(x) = \boxed{[-4, +\infty)}$$

$$f(x) = \begin{cases} 3x - 4 & \text{si } x < 3 \\ x + 5 & \text{si } 3 \leq x \leq 7 \\ 12 & \text{si } 7 < x < 10 \end{cases}$$



$$\text{Dom } f(x) = \boxed{(-\infty, 10)}$$

$$f(x) = \begin{cases} 2 & \text{si } -3 \leq x < 1 \\ -2x + 3 & \text{si } 1 \leq x < 5 \\ -7 & \text{si } 5 \leq x < 8 \end{cases}$$



$$\text{Dom } f(x) = \boxed{[-3, 8)}$$



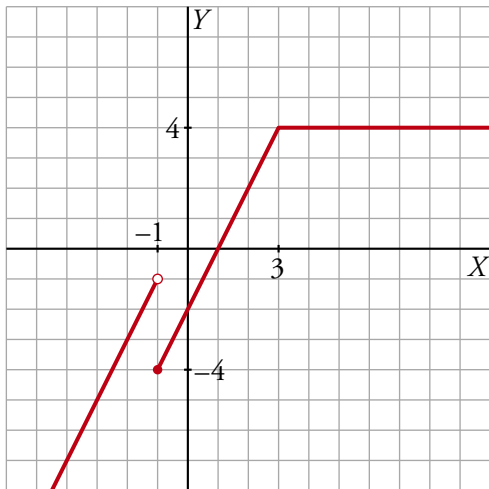
2. Refuerza: funciones definidas mediante dos o tres trozos

Soluciones

3 Representa las siguientes funciones, señala su dominio de definición y estudia su continuidad:

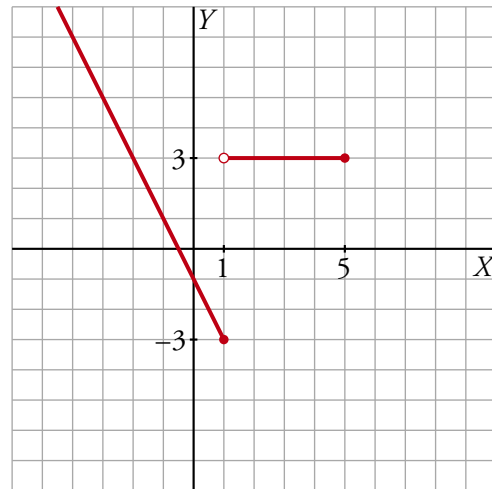
$$f(x) = \begin{cases} 1 + 2x & \text{si } x < -1 \\ 2x - 2 & \text{si } -1 \leq x < 3 \\ 4 & \text{si } x \geq 3 \end{cases}$$

$$f(x) = \begin{cases} -2x - 1 & \text{si } x \leq 1 \\ 3 & \text{si } 1 < x \leq 5 \end{cases}$$



Dom $f(x)$ =

Es discontinua en .



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Es discontinua en .