

Estudia la continuidad de las siguientes funciones:

$$1. \quad y = \frac{x-1}{x(x+1)(x^2-4)}$$

$$2. \quad y = \frac{x^2-1}{x^2-3x+2}$$

$$3. \quad y = \ln \frac{x+1}{x-1}$$

$$4. \quad y = x \cdot \sqrt{\frac{x+1}{x-1}}$$

$$5. \quad y = \frac{\sqrt{x}}{\sqrt{x}-1}$$

$$6. \quad y = x^2 - 3x + 2$$

$$7. \quad y = \begin{cases} x^2, 0 \leq x \leq 1 \\ 2-x, 1 < x \leq 2 \end{cases}$$

$$8. \quad y = \begin{cases} e^x, x < 0 \\ a+x, x \geq 0 \end{cases}$$

$$9. \quad y = \begin{cases} \frac{1}{(1+x)^2}, x \neq -1 \\ a, x = -1 \end{cases}$$

$$10. \quad y = \begin{cases} x, |x| \leq 1 \\ 1, |x| > 1 \end{cases}$$

$$11. \quad y = E(x)$$

$$12. \quad y = x - E(x)$$

$$13. \quad y = \frac{|x|+x}{2}$$

$$14. \quad y = \frac{|x|-x}{2}$$

$$15. \quad y = \frac{x^2-2x+3}{x^2-6x+9}$$

$$16. \quad y = \begin{cases} x^2-2x+3, x \leq -2 \\ 2x+1, -2 < x < 2 \\ 3x-1, x \geq 2 \end{cases}$$

$$17. \quad y = \begin{cases} \frac{3}{x+2}, x \leq -1 \\ -3x, x > -1 \end{cases}$$

$$18. \quad y = \sqrt{\frac{x^2+4}{x^2-4}}$$

$$19. \quad y = \sqrt{x^2+3x+1}$$

$$20. \quad y = \frac{2x}{x^2+6}$$