

LÍMITES – Cálculo y representación

$$1. \lim_{x \rightarrow 1} \frac{x^3 - 2x^2}{x^2 + 1}$$

$$2. \lim_{x \rightarrow 2} \frac{x^2 + 1}{x - 2}$$

$$3. \lim_{x \rightarrow 0} \frac{x^3 - 2x}{x^2 + 2x}$$

$$4. \lim_{x \rightarrow 1} \frac{x^2 + 2x - 3}{x^2 + x - 2}$$

$$5. \lim_{x \rightarrow -\infty} (2x + 4)^2$$

$$6. \lim_{x \rightarrow +\infty} \frac{2x + 1}{3x - x^2}$$

$$7. \lim_{x \rightarrow +\infty} \frac{x^2 - 3x}{2x^2}$$

$$8. \lim_{x \rightarrow +\infty} \frac{3x^3}{x^2}$$

$$9. \lim_{x \rightarrow +\infty} \sqrt{x^2 + 2x} - x$$

$$10. \lim_{x \rightarrow +\infty} \sqrt{x^4 + 2x} - x$$

$$11. \lim_{x \rightarrow 3} \frac{x^2 - 9}{\sqrt{x + 1} - 2}$$

$$12. \lim_{x \rightarrow +\infty} \sqrt{x^2 + 2x} + x$$

$$13. \lim_{x \rightarrow +\infty} \frac{2x + 3}{4x + 4}^{-x}$$

$$14. \lim_{x \rightarrow +\infty} \frac{4x + 3}{4x + 4}^{2x}$$

$$15. \lim_{x \rightarrow 2} \frac{x + 2}{x + 3} \cdot \frac{1}{x - 2}$$

$$16. \lim_{x \rightarrow 2} \frac{2x}{x + 2} \cdot \frac{3}{2 - x}$$

ASÍNTOTAS Y RAMAS INFINITAS – Cálculo y representación

$$1. y = x^3 - 2x - 1$$

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

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

$$4. y = \frac{2x^2 + 1}{x + 1}$$

$$5. y = \frac{x^4 + 1}{x^2}$$