

Si calcolino i seguenti limiti:

$$1. \lim_{x \rightarrow +\infty} x^{50} + 8x - 2x$$

$$2. \lim_{x \rightarrow +\infty} \frac{x^{30} + 12x^{29} + 7}{x^{41} - 258x^{40}}$$

$$3. \lim_{x \rightarrow -\infty} -7x^3 + 5x - 9$$

$$4. \lim_{x \rightarrow +\infty} \frac{x^5 + 9x - 7}{x^2 - 3x^3}$$

$$5. \lim_{x \rightarrow 0^-} \frac{-x^2 + 3x - 1}{x^2 - 7x}$$

$$6. \lim_{x \rightarrow +\infty} \frac{-2x^3 + 5x - 8}{x^3 + x^2}$$

$$7. \lim_{x \rightarrow +\infty} x^2 - \log x^4$$

$$8. \lim_{x \rightarrow 0^+} 3x - \log x$$

$$9. \lim_{x \rightarrow -\infty} \frac{x^5 - 7x + 10}{x^3 + x^2 - 5}$$

$$10 \quad \lim_{x \rightarrow -\infty} \frac{x^2 - x + 1}{x - 4x^2 + 7}$$

$$11. \lim_{x \rightarrow 0^+} \frac{x^2 - x + 1}{x + 3}$$

$$12. \lim_{x \rightarrow 2^+} \frac{x^4 - 3x + 1}{x^2 - 3x + 2}$$

$$13. \lim_{x \rightarrow +\infty} \log \frac{x^3 - 1}{x^3 + 1}$$

$$14. \lim_{x \rightarrow 2^-} \log \frac{1}{x - 2}$$

$$15. \lim_{x \rightarrow +\infty} e^{\frac{x^2 - x - 1}{x^3 + 5x}}$$

$$16. \lim_{x \rightarrow 1^-} e^{\frac{x^2 + 2x + 1}{x^2 + 3x - 4}}$$

$$17 \quad \lim_{x \rightarrow 3^+} \frac{x - 10}{x^2 - x - 6}$$