ESERCIZI CAP. 2 PARTE PRIMA

Calcolare i limiti delle seguenti successioni

$$a_n = \frac{n^4 - 2n + 1}{n^3 - 3} \qquad a_n = \frac{3n^2 - n^5}{1 + n^2}$$

$$a_n = \frac{2n^4 - 6n^8}{n^3 - n^5} \qquad a_n = \frac{(2n+1)^3}{n^3 + 4}$$

$$a_n = \frac{8n+1}{(2n-5)^2} \qquad a_n = \frac{n^3 - 6}{n^4 + 1}$$

$$a_n = \log_3 \frac{2n+1}{n^2+6} \qquad a_n = \log \frac{4n^2+1}{2n+3}$$

$$a_n = \log_{\frac{1}{e}} \frac{1-n^2}{3-2n} \qquad a_n = \log_{\frac{1}{4}} \frac{n+1}{2n^2+6}$$

$$a_n = e^{\frac{1-n}{n^2+8}} \qquad a_n = 2^{\frac{2n+1}{n+6}}$$

$$a_n = 3^{\frac{2n-n^3}{n^2+1}} \qquad a_n = \pi^{\frac{n^8+1}{n+7}}$$

$$a_n = \left(\frac{2}{3}\right)^{\frac{n^5+4}{2n-3}} \qquad a_n = \left(\frac{1}{9}\right)^{\frac{2n-n^3}{n+1}}$$

$$a_n = (3n-2)\sin\frac{2}{n+4}$$

$$a_n = (n-1)^2 \sin\frac{n+1}{(n+2)^3}$$

$$a_n = (2n-1)\,\mathrm{tg}\,\frac{n}{n^2+3}$$

$$a_n = \frac{\mathrm{tg}\,\frac{1}{n^2+1}}{\sin^2\frac{2}{n}}$$

$$a_n = \frac{\sin\frac{n}{n^3+6}}{\mathrm{arctg}\,\frac{3n^2+1}{n^4-5}}$$

$$a_n = \frac{1-\cos\frac{3n}{n^4+6}}{\sin^2\frac{2}{n^3}}$$

$$a_n = \frac{\sin^2\frac{1}{n+3}}{\cos\frac{2n+1}{3n^2+2}-1}$$