

# CALCUL LIMITEI LOR DE ŞIRURI

## PRIN METODA FACTORIZĂRII

### COMUN FORTAT

$$1) \lim_n \frac{n^2+5n}{3n+1} \quad 2) \lim_n \frac{n^2+5n}{7n^2+1}$$

$$3) \lim_n \frac{n^2+4}{-2n+1} \quad 4) \lim_n \frac{\sqrt{n^2+1}}{2n+3}$$

$$5) \lim_n \frac{\sqrt{4n^2+2}}{n^2+1} \quad 6) \lim_n \frac{\sqrt{n^2+2}}{-2n+1}$$

$$7) \lim_n (n^4-2n^3+1) \quad 8) \lim_n (2n-n^2)$$

$$9) \lim_n (\sqrt{n^2+n}-2n) \quad 10) \lim_n (n+\sqrt{n^2-n})$$

$$11) \lim_n \frac{\sqrt{n^2+1}+n}{3n+1}$$

$$12) \lim_n (\sqrt{n^2+1}-n^2)$$

$$13) \lim_n \frac{\sqrt{4n^2+1}-n^3}{2n+1}$$

$$14) \lim_n \frac{n^2-5n}{3n+1}$$

$$15) \lim_n \frac{n-2n^2+3}{\sqrt{n^2+1}+2}$$

$$16) \lim_n \frac{2n+1}{\sqrt{n^2-n}-n^2}$$

$$17) \lim_n \frac{3n^2-n+1}{\sqrt{n^2+n}+2n}$$

$$18) \lim_n \frac{\sqrt{n^2+1}-n^2}{\sqrt{n^2+1}-n}$$

$$19) \lim_n (\sqrt{n^2+1}+n^2-3n)$$

$$20) \lim_n (2n^2-3-\sqrt{n^2+2})$$