

Übungen in Analysis \diamond Exercices en analyse \diamond Type I1 \diamond I / 9

Probl. 1 $\langle a_n \rangle = \left\langle \frac{\cos(2\pi + \frac{1}{5}n^3)}{n^2} \right\rangle \rightsquigarrow a_n \rightarrow ?$

Probl. 2 $\langle a_n \rangle = \left\langle \frac{n^2 - 2n + 4}{4n^3 + n^2 - 1} \right\rangle \rightsquigarrow a_n \rightarrow ?$

Probl. 3 $\langle a_n \rangle = \left\langle \frac{\ln(n)}{n^{1.5}} \right\rangle \rightsquigarrow a_n \rightarrow ?$

Hinweis: Skizze! • *Indication: Exquisse!* $\rightsquigarrow \ln(n), n$

Probl. 4 $\langle a_n \rangle = \left\langle \left(2 + \frac{3}{n} + \frac{4}{n^2}\right) \cdot \left(5 + \frac{6 + 7n}{8n}\right) \right\rangle \rightsquigarrow a_n \rightarrow ?$

Probl. 5 $\langle a_n \rangle = \left\langle 5 e^{\tan(\pi + \frac{2}{n^3})} \right\rangle \rightsquigarrow a_n \rightarrow ?$

Probl. 6 $\langle a_n \rangle = \left\langle \frac{n+1}{\sqrt{n}+1} \right\rangle \rightsquigarrow a_n \rightarrow ?$

Probl. 7 $\langle a_n \rangle = \left\langle \frac{(3n+1)}{\left(\frac{n(2n-1)}{n+2}\right)} \right\rangle \rightsquigarrow a_n \rightarrow ?$