

Übungen in Analysis \diamond Exercices en analyse \diamond Type B2 \diamond I / 9

Probl. 1 $\langle a_n \rangle = \left\langle \frac{\sin(3\pi + \frac{4}{5}n^2)}{n^2} \right\rangle \rightsquigarrow a_n \rightarrow ?$

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

Probl. 3 $\langle a_n \rangle = \left\langle \frac{\ln(n)}{n^2} \right\rangle \rightsquigarrow a_n \rightarrow ?$

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

Probl. 4 $\langle a_n \rangle = \left\langle \left(1 + \frac{1}{n} + \frac{1}{n^2}\right) \cdot \left(5 + \frac{2+n}{n}\right) \right\rangle \rightsquigarrow a_n \rightarrow ?$

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