

Übungen in Analysis \diamond **Exercices en Analyse** \diamond **T. B2** \diamond **II / 11**

Probl. 1 $\int_0^{\pi} \sin^2 x \, dx = ? \quad \rightsquigarrow \text{ (!!!!) } \sin^2 x = 1 - \cos^2 x$

Probl. 2 $\int_1^e x \cdot \ln(x) \, dx = ?$

Probl. 3 $\int_1^e x^2 \cdot \ln(x) \, dx = ?$

Probl. 4 $\int_0^{\pi} x^2 \cdot \sin x \, dx = ?$