

Übungen in Analysis $\diamond$ Exercices en analyse $\diamond$ T. I1 $\diamond$ I / 15

Probl. 1	$f(x) = x^2 \cdot \cos(x)$	$\leadsto f'(x) = ?$
Probl. 2	$f(x) = (\sin(x))^3$	$\leadsto f'(x) = ?$
Probl. 3	$f(x) = 3x - \frac{x}{\cos(x)}$	$\leadsto f'(x) = ?$
Probl. 4	$f(x) = x \cdot \sqrt{x}$	$\leadsto f'(x) = ?$
Probl. 5	$f(x) = \frac{1}{x^2} + \frac{x^2}{x^2 + 2}$	$\leadsto f'(x) = ?$
Probl. 6	$f(x) = \sin(2x) \quad (= 2 \sin(x) \cdot \cos(x))$	$\leadsto f'(x) = ?$
Probl. 7	$f(x) = \frac{1}{x} \cdot \frac{\cos(x)}{\sin(x)}$	$\leadsto f'(x) = ?$
Probl. 8	$f(x) = \frac{1}{x^3 - 2x + \cos(x)}$	$\leadsto f'(x) = ?$
Probl. 9	$f(x) = \cos(\sin(\cos(x^4)))$	$\leadsto f'(x) = ?$