

Übungen in Analysis  $\diamond$  Exercices en analyse  $\diamond$  T. E1  $\diamond$  I / 14

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**Probl. 1**  $\int_3^t x^5 dx = F(t)$   $F(t) = 10 \Rightarrow t = ?$

**Probl. 2**  $\int_4^6 \frac{1}{2x+1} dx = ?$

**Probl. 3**  $\int_0^\pi x^2 \cdot \sin(x) dx = ?$

**Probl. 4**  $\int_2^4 \frac{1}{4x^2-1} dx = ?$

**Probl. 5**  $\int_{-4}^4 x^5 \cos(x) dx = ?$

**Probl. 6**  $\int x^2 \cos(4x^3 + 5) dx = ?$

**Probl. 7**  $\int_0^\pi \cos(x) \cdot e^{\sin(x)} dx = ?$