

## Übungsblatt 2 : Umkehrung der Kettenregel

Berechnen :

1.  $\int \cos(1 - 7x) \, dx$

11.  $\int \frac{1}{(2x - 3)^3} \, dx$

2.  $\int \sin\left(2x - \frac{\pi}{3}\right) \, dx$

12.  $\int \frac{1}{\sqrt{3x+1}} \, dx$

3.  $\int (x + 3)^3 \, dx$

13.  $\int \frac{x+1}{\sqrt{x^2+2x}} \, dx$

4.  $\int (2x - 1)^2 \, dx$

14.  $\int \frac{-7}{\sqrt[5]{4x-3}} \, dx$

5.  $\int (7x - 2)^5 \, dx$

15.  $\int x \cos(1 - 3x^2) \, dx$

6.  $\int (3x^2 + x)^3 (6x + 1) \, dx$

16.  $\int \frac{9x^2 - 3}{(2x^3 - 2x + 1)^3} \, dx$

7.  $\int (4x^2 + 3)^4 x \, dx$

17.  $\int \frac{\cos(3x)}{\sin^2(3x)} \, dx$

8.  $\int (4x^2 - 2x + 7)^3 (1 - 4x) \, dx$

18.  $\int \frac{\sqrt{\ln(x)}}{x} \, dx$

9.  $\int \sin^2(x) \cdot \cos(x) \, dx$

19.  $\int \frac{1}{x \cdot \ln(x)} \, dx$

10.  $\int \sqrt{x+3} \, dx$

20.  $\int \frac{\cos(\sqrt{x})}{\sqrt{x} \cdot \sin(\sqrt{x})} \, dx$