

## Practice for Integration by Substitution

Name: \_\_\_\_\_

1.  $\int \frac{\sin(3x)}{2} dx$

2.  $\int \frac{3x-1}{\sqrt[3]{(1-2x+3x^2)}} dx$

3.  $\int \frac{\sin(2x)}{(1+3\cos(2x))^2} dx$

4.  $\int (2x^3 - 1)x^2 dx$

5.  $\int \frac{1}{x\sqrt{\ln(x)}} dx$

6.  $\int \frac{1}{20+5x^2} dx$

7.  $\int 3e^{(2x)} \cos(e^{(2x)}) dx$

8.  $\int_{-\pi}^{\pi} \frac{\cos(x)}{\sqrt{4+3\sin(x)}} dx$

9.  $\int_{-\pi/4}^0 \tan x \sec^2(x) dx$