

## Extra Homework-Math 12-Benedetto

Due Monday September 12th

at the start of class

Review of Integration using  $u$ -substitution: Please try and work these indefinite integrals very quickly. Practice! Write your solutions neatly on a **separate** piece of paper than your other HW.

1.  $\int \frac{1}{e^{7x}} dx$

2.  $\int e^{14x} dx$

3.  $\int e^{1-2x} dx$

4.  $\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$

5.  $\int e^x \sin(e^x) dx$

6.  $\int \cos\left(\frac{x}{5}\right) dx$

7.  $\int \sec^2 \theta \tan^3 \theta d\theta$

8.  $\int (2 - 3x)^5 dx$

9.  $\int \frac{1}{7-x} dx$

10.  $\int \frac{1}{\sqrt{7x+5}} dx$

11.  $\int \frac{1}{(3-5x)^2} dx$

12.  $\int \frac{1}{2x-1} dx$

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

14.  $\int x\sqrt{7-3x^2} dx$

15.  $\int \frac{1}{x \ln x} dx$

16.  $\int \sin(\pi x + 1) dx$

17.  $\int x(1-x)^{79} dx$

18.  $\int x^3(x+1)^{79} dx$

19.  $\int \frac{x^2}{\sqrt{3-x}} dx$