

## Evaluate the following integrals

1.  $\int 7e^{4x} dx$

2.  $\int_1^3 \frac{x}{1+x^2} dx$

3.  $\int_2^5 \frac{1}{x \ln(x)} dx$

4.  $\int \frac{\sin(\sqrt{x})}{\sqrt{x}} dx$

5.  $\int \sec(x) \tan(x) dx$

6.  $\int \tan(x) (\sec(x))^2 dx$   
Let  $u = \tan(x)$

7.  $\int \tan(x) (\sec(x))^2 dx$   
Let  $u = \sec(x)$

8.  $\int \frac{1}{1+x^2} dx$