

Find the following integrals, and *check your answers!!*

1.  $\int_2^5 \frac{1}{x \ln(x)} dx$       Hint: Let  $u = \ln(x)$

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

3.  $\int x^2 \sec(x^3) \tan(x^3) dx$

4.  $\int e^x \cos(e^x) dx$

5.  $\int e^x e^{2x} dx$       Hint:  $e^{2x} = (e^x)^2$

6.  $\int \frac{(\sec(x))^2}{\tan(x)} dx$

7.  $\int x\sqrt{x-1} dx$       Hint: Let  $u = x - 1$