

Find the following integrals, and *check your answers by differentiating!!*
(The first four are the last four from Tuesday; if you already did those,
move on to #5.)

1. $\int \frac{e^{\sqrt{x+1}}}{\sqrt{x+1}} dx$ ($u = \sqrt{x+1}$)

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

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

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

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

6. $\int \sin(x) \cos(x) dx$

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

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

9. $\int x\sqrt{x-1} dx$

10. $\int_0^{\pi/4} \tan(x) dx$

11. $\int \frac{(1+\sqrt{x})^3}{\sqrt{x}} dx$