1. Compute $\int e^{4x-9}\, dx$

2. Compute $\int x \sin(x^2 + 1)\, dx$

3. Compute $\int \dfrac{e^{\sqrt{x}}}{\sqrt{x}}\, dx.$

4. Compute $\int_1^4 \dfrac{e^{\sqrt{x}}}{\sqrt{x}}\, dx.$

5. Compute $\displaystyle\int \frac{\arctan(x)}{1+x^2}\,dx$

6. Compute $\displaystyle\int \frac{x^3}{\sqrt{1-x^4}}\,dx$

7. Compute $\displaystyle\int \frac{x}{\sqrt{1-x^4}}\,dx$.

8. Compute $\int \dfrac{\sec^2(x)}{\tan(x)}\,dx$

9. Compute $\int \sec^2(x)\tan(x)\,dx$

10. Compute $\int \dfrac{\sin(\theta)}{1+\cos(\theta)}\,d\theta$

11. Compute $\displaystyle\int \frac{1}{x \ln(x)} \, dx$

12. Compute $\displaystyle\int \frac{\sin(4/x)}{x^2} \, dx$

13. Compute $\displaystyle\int \frac{e^x}{e^x - 3} \, dx$