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

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

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

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

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 $\displaystyle \int \frac{\sec^2(x)}{\tan(x)}\, dx$

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

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

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

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

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