

Evaluate the following integrals.

1. $\int_1^5 x\sqrt{28-x^2} dx$

5. $\int_1^4 \frac{\sqrt{x}}{1+\sqrt{x}} dx$

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

6. $\int \frac{\sec(x)^2}{\sqrt{1-\tan(x)^2}} dx$

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

7. $\int \sin(x)^2 dx$

4. $\int \tan(x) dx$

8. $\int_0^\pi e^x \sin(x) dx$