

Work together in pairs to compute the following antiderivatives and definite integrals.

1. $\int e^{\sin \theta} \cos \theta \, d\theta$

2. $\int x^2(x^3 + 5)^9 \, dx$

3. $\int \frac{dx}{5 - 3x}$

4. $\int \frac{1}{x \ln(x)} dx$

5. $\int_1^2 \frac{e^{1/x}}{x^2} dx$

6. $\int_{-1}^2 \frac{t^2}{\sqrt{t+2}} dt$

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

8. $\int \frac{\cos(\sqrt{x})}{\sqrt{x}} dx$

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

10. $\int \frac{5}{8 + 4r^2} dr$

11. $\int_0^2 \frac{x + 3}{(x^2 + 6x + 1)^2} dx$

12. $\int \frac{1}{1 + e^z} dz$ You might need a hint after you do your substitution. Ask!