

AP Calculus BC
Integration Techniques
Practice – NO CALCULATOR

1. $\int x \ln x \, dx$

2. a. Evaluate $\int \frac{2x}{x^2 - 4} \, dx$ using a u-substitution

b. Evaluate $\int \frac{2x}{x^2 - 4} \, dx$ using partial fractions

c. Evaluate $\int \frac{2x}{x^2 - 4} \, dx$ using a trig substitution

3. $\int \sin^4(x) \cos^3(x) dx$

4. $\int \frac{4}{x^2 - 4x} dx$

5. $\int \frac{x^2}{(4-x^2)^{3/2}} dx$