

## INTEGRATION PRACTICE

Evaluate the integrals below by **first** identifying the **technique** that is appropriate. Proceed only far enough to be sure your strategy will work. Then work the problems according to **which one is hardest for you**.

1.  $\int_0^{\pi/4} \sin^2(2\theta) \, dx$

2.  $\int x\sqrt{x^2 + 1} \, dx$

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

4.  $\int_2^6 \ln(t) \, dt$

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

6.  $\int \frac{6x}{x^2 - 3x - 4} dx$

7.  $\int \sin^6(x) \cos^3(x) dx$

8.  $\int_0^{\pi/2} x \sin(7x) dx$