

## Quiz 1 Practice (Again!)

Evaluate each integral. Show all work.

1. Evaluate  $\int e^{3x} \cos(2x) dx$ .

2. Evaluate  $\int \sin^5 x \cos^6 x dx$ .

3. Evaluate  $\int \frac{\sqrt{9x^2 - 4}}{x^2} dx$ .

4. Evaluate  $\int \frac{x^3}{(x^2 + 1)^2} dx$ .

5. Evaluate  $\int \frac{x^2 + 7x + 1}{(x - 1)^2(x + 2)} dx$ .

6. Evaluate  $\int x \arctan x dx$ .

1. Evaluate  $\int e^{3x} \cos(2x) dx$ .

2. Evaluate  $\int \sin^5 x \cos^6 x \, dx$ .

3. Evaluate  $\int \frac{\sqrt{9x^2 - 4}}{x^2} dx$ .

4. Evaluate  $\int \frac{x^3}{(x^2 + 1)^2} dx$ .

5. Evaluate  $\int \frac{x^2 + 7x + 1}{(x - 1)^2(x + 2)} dx$ .

6. Evaluate  $\int x \arctan x \, dx$ .