

Name: _____
AP Calculus AB: Integrating Using U-Substitution

Date: _____
Ms. Loughran

Do Now:

1. $\int \frac{dt}{t\sqrt{2t}} =$

Classwork:

1. $\int 2x(x^2 + 1)^{23} dx$

2. $\int \frac{3xdx}{\sqrt{4x^2 + 5}}$

Steps:

1.

2.

3.

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

4. $\int x(2 - x^2)^3 dx$

5. $\int \sin x e^{\cos x} dx$