

Name: _____

Show all work, simplify, and box your answers. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for full credit.

Due next class. Students who turn assignments in late (or do not attempt a problem) forfeit their ability to rewrite those problems for credit.

1. Evaluate $\int 28(7x - 2)^{-5} dx$
2. Evaluate $\int \frac{9r^2 dr}{\sqrt{1 - r^3}}$
3. Evaluate $\int \frac{1}{\sqrt{x}(1 + \sqrt{x})^2} dx$
4. Evaluate $\int xe^{6x^2} dx$.
5. Evaluate $\int \sec^2(3x + 2) dx$
6. Evaluate $\int_0^{\pi/4} \tan x \sec^2 x dx$
7. Evaluate $\int_0^{\sqrt{3}} \frac{4x}{\sqrt{x^2 + 1}} dx$
8. Evaluate $\int_0^{\pi/6} (1 - \cos 3t) \sin 3t dt$
9. Evaluate $\int_0^1 (4y - y^2 + 4y^3 + 1)^{-2/3} (12y^2 - 2y + 4) dy$
10. Evaluate $\int_0^4 \frac{x}{x^2+1} dx$