

(5.5) The Substitution Rule

Full Name: _____

1. Compute each of the following integrals.

(a) $e^{\tan t} + C$

(b) $\sin(e^x + 2) + C$

(c) $\frac{1}{4} \ln |1 + x^4| + C$

(d) $4 \sec(2x^3) + C$

(e) $\frac{4}{3} (3x^2 - 5x)^{3/2} + C$

(f) $\frac{1}{6} (x^2 + 1)^6 + C$

(g) $-\frac{1}{6} \cos^6 x + C$

(h) $\frac{1}{4} (\ln x)^4 + C$

(i) $-\frac{1}{2} \cos(2x + 5) + C$

(j) $3 \tan(5x) + C$

(k) 2