(7.2) Trigonometric Integrals

Full Name: _____

1. Evaluate each of the following indefinite integrals.

(a) $\dfrac{1}{11}\sin^{11}(x) - \dfrac{1}{13}\sin^{13}(x) + C$

(b) $-2\cos^{15}(3\theta) + \dfrac{30}{17}\cos^{17}(3\theta) + C$

(c) $\dfrac{1}{22}\tan^{22}x + \dfrac{1}{20}\tan^{20}x + C$

(d) $\dfrac{1}{18}\tan^{18}x + \dfrac{1}{8}\tan^{16}x + \dfrac{1}{14}\tan^{14}x + C$

(e) $\dfrac{3}{4}\tan^{12}(3x) + \dfrac{9}{10}\tan^{10}(3x) + C$

(f) $\dfrac{20}{19}\sec^{19}x - \dfrac{20}{17}\sec^{17}x + C$

(g) $\dfrac{1}{26}\sec^{13}(2x) - \dfrac{1}{11}\sec^{11}(2x) + \dfrac{1}{18}\sec^{9}(2x) + C$

(h) $2x - \dfrac{1}{2}\cos(4x) + C$

(i) $6x + \dfrac{1}{2}\sin(12x) + C$

(j) $12x - \sin(16x) + \dfrac{1}{8}\sin(32x) + C$