

## Answer Key

### Testname: CALC II INTEGRAL REVIEW

$$1) \frac{1}{7}x^3 \sin 7x + \frac{3}{49}x^2 \cos 7x - \frac{6}{343}x \sin 7x - \frac{6}{2401} \cos 7x + C$$

$$2) \frac{e^{7x}}{65} [4 \sin 4x + 7 \cos 4x] + C$$

$$3) 4.66$$

$$4) 2\pi(7\ln 7 - 6)$$

$$5) \frac{e}{2}$$

$$6) 5$$

$$7) \frac{1}{3(3 + \cos t)^3} + C$$

$$8) \frac{-4}{3 + \tan^3 x} + C$$

$$9) \frac{1}{2} \sin 4x - \frac{1}{6} \sin^3 4x + C$$

$$10) -\frac{1}{2} \cos^4 \theta + C$$

$$11) \frac{1}{14} \sec 7x \tan 7x + \frac{1}{14} \ln |\sec 7x + \tan 7x| + C$$

$$12) \frac{1}{9} \tan^3 3t - \frac{1}{3} \tan 3t + t + C$$

$$13) 2$$

$$14) -\frac{\sqrt{3-t^2}}{3t} + C$$

$$15) \frac{1}{25x} + C$$

$$16) \frac{x}{16\sqrt{16+x^2}} + C$$