

ANSWER KEY

(1) $\frac{3\pi}{4}$

(2) $\frac{5}{4} \sec(x^{4/5}) + C$

(3) e

(4) $\ln(4) - \frac{3}{4}$

(5) $R = 1$

(6) $\frac{217}{999}$

(7) $\frac{576\pi}{7}$

(8) $\frac{-\cos^3(1/x)}{x^2}$

(9) $\frac{9}{2} \arcsin\left(\frac{x}{3}\right) - \frac{1}{2}x\sqrt{9-x^2} + C$

(10) $\pi\left(Rh^2 - \frac{h^3}{3}\right)$