

1)

$$6x^{5/2} + 20x^{-1/2} + 5 \ln(x) + C$$

2)

$$\frac{5x + 7}{x^2 + 4} - \frac{5}{x + 6}$$

3)

$$\frac{x}{2} - \frac{\sin(12x)}{24} + C$$

4)

$$\frac{\sin(6x)}{6} - \frac{\sin^3(6x)}{18} + C$$

5)

$$-\frac{1}{3}(4x^3 + 15x^2 + 29)^{-1/2} + C$$

6)

$$\frac{1}{2} \ln(2x + 5) + \frac{1}{4} e^{4x} + C$$

7)

$$\frac{2}{125}(5x + 11)^{5/2} - \frac{22}{75}(5x + 11)^{3/2} + C$$

8)

$$\frac{1}{5} \ln(x) - \frac{x^5}{25} + C$$

9)

$$\frac{5}{2} \ln(x^2 + 25) + 8 \arctan\left(\frac{x}{5}\right) + C$$

10)

$$\frac{9}{64} \int_{\pi/4}^{\pi/3} \tan^2(\theta) d\theta$$