

Worksheet 6.1 & 6.2 - Answers

1. $\frac{1}{3}(2x-1)^{\frac{3}{2}} + C$

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

3. $x^{\frac{2}{3}} + C$

4. $\frac{1}{\cos x} + C$

5a. $\frac{1}{6}(x^2+1)^3 + C$

5b. $\frac{x^5}{5} + \frac{2x^3}{3} + x + C$

5c. $-\frac{1}{2(x^2+1)} + C$

6. $-\frac{2}{3}(1-e^x)^{\frac{3}{2}} + C$

7a. $\ln|x+1| + C$

7b. $-\frac{1}{2(x+1)^2} + C$

7c. $2\sqrt{x+1} + C$

8a. $\frac{1}{2}\ln|1+x^2|+C$

8b. $\tan^{-1}x+C$

8c. $x-\frac{x^3}{3}+C$

8d. $\frac{1}{2}(\tan^{-1}x)^2+C$

9. $-\frac{1}{2}\cos(2x)+C$

10. $x+5\ln|x|+C$

11. $e^{\sin x}+C$