

Homework 16 Final Answers

3. e^x

4. 0

5. $e^{2x} \cdot 2$

6. $e^x (x^3 + 3x^2 + 2x + 2)$

7. $\frac{e^x}{(1-e^x)^2}$

8. $e^{-2x} (-\sin x - 2\cos x)$

9. $-e^{-x}$ OR $-\frac{1}{e^x}$

10. $3e^{3x} - \frac{3}{e^{3x}}$

11. $\frac{e^{\sqrt{x}}}{2\sqrt{x}}$

12. $e^{\sin x} \cdot \cos x$

13. $\cos(e^x) \cdot e^x$

14. $e^x (x^2 + 2x)$

15. $4 e^{\tan(4x)} \cdot \sec^2(4x)$

16. $4 \sec^2(e^{4x}) \cdot e^{4x}$

17. $-7e^{-7x}$ OR $-\frac{7}{e^{7x}}$

18. $\frac{e^x + 5e^{5x}}{2\sqrt{e^x + e^{5x}}}$

19. $\frac{-(3x^2 - e^{\cos x} \cdot \sin x)}{2(x^3 + e^{\cos x})^{3/2}}$

20. $y = 2x + \frac{1}{2}$