

Derivatives

Moderate

Logarithms & Exponents

1. $\frac{d}{dx}(5e^x)$

2. $\frac{d}{dx}(2\log_3(x))$

3. $\frac{d}{dx}(e^x \ln(x))$

4. $\frac{d}{dx}(e^x + x^e)$

5. $\frac{d}{dx}(\ln(x) \ln(5))$

6. $\frac{d}{dx}\left(\frac{1}{2}e^x\right)$

7. $\frac{d}{dx}\left(\frac{e^x}{x}\right)$

8. $\frac{d}{dx}(x \ln(x))$

9. $\frac{d}{dx}(\log_4(x))$

10. $\frac{d}{dx}(\ln(x) e^x)$

Answers**Derivatives****Moderate****Logarithms & Exponents**

1. $5e^x$

2. $\frac{2}{\ln(3)x}$

3. $e^x \ln(x) + \frac{e^x}{x}$

4. $e^x + ex^{e-1}$

5. $\frac{\ln(5)}{x}$

6. $\frac{1}{2}e^x$

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

8. $\ln(x) + 1$

9. $\frac{1}{2\ln(2)x}$

10. $\frac{e^x}{x} + e^x \ln(x)$