

Derivatives of Exponential Functions

Directions: Find the derivative of each function.

1. $y = e^{2x}$

2. $y = e^{(x^2+1)}$

3. $y = e^{\sin x}$

4. $y = e^{(x^3 - \cos 2x)}$

5. $y = e^{\tan^3 x}$

6. $y = 2^{3x}$

7. $y = 3^{\frac{1}{4}x}$

8. $y = 4^{\sec x}$

9. $y = 5^{x^2 \cot x}$

10. $y = 10^{\csc 10x}$