

Find the derivative of each function.

1. $\ln(x^2 - x)$

7. $\left(\frac{x^2}{\ln(x)}\right)^3$

2. $3 \cos(\sqrt{x})$

8. $\sqrt{x^2 \cos(x)}$

3. $\sin(\tan(x))$

9. $\cos(\sin(x^5))$

4. e^{x^2}

10. $\tan(e^x)$

5. $(e^x)^2$

11. $\sec(x)$

6. $e^{\sin(3x)}$

12. $\frac{\sec(x^2)}{e^x}$