

Find the derivative of each function.

1.  $\frac{1}{\sqrt{x} + \tan(x)}$

2.  $(2x - 5)(3x + 2)^2$

3.  $\sec(\sqrt{x} + x^2)$

4.  $\frac{e^{\sin(x)}}{\cos(x)}$

5.  $\log_{\pi}(\ln(3x^{\pi}) + \pi x)$