

For each function, find its derivative. Remember that you can verify your answer by graphing.

1.  $6e^x \sin(x)$

2.  $4 \ln(x)(x^3 - 3)$

3.  $\frac{x + \cos(x)}{7x^2}$

4.  $\tan(x)$       Hint:  $\tan(x) = \frac{\sin(x)}{\cos(x)}$