Find the derivative of each function.

1. $f(x) = \cos(x) - \sin(x) + \cos(4)$

2. $f(x) = \cos(x)\sin(x)$

3. $f(x) = \cos(x^3)$

4. $f(x) = \tan(x)^3$

5. $f(x) = \sin(x^2 + 4x - 1)^3$

6. $f(x) = \sec(x)$ Hint: $\sec(x) = \dfrac{1}{\cos(x)}$