L6 (5.4 & 5.5) The Derivatives of the Primary Trig Functions

If $y = \sin(x)$, then $y' = \underline{ \quad }$

If $y = \cos(x)$ then $y' = \underline{ \quad }$

If $y = \tan(x)$, then $y' = \underline{ \quad }$
Ex1: Find $y'$ & simplify.

a) $y = \frac{5 \sin(4x)}{2}$

b) $y = \frac{1}{\cos 6x}$

c) $y = \tan^2 \sqrt{x}$

d) $y = \frac{\sin \theta}{1 + \cos \theta}$
Ex2: Find the slope of the tangent line to the curve 
\( y = (\sin x - \cos x)^2 \) at \( x = \frac{5\pi}{4} \).
Assigned Work:

p.256 #1, 2, 3, 5

p.260 #1, 2, 3, 4