Written Homework Problems §3.3 (part 1)
15 problems for 30 points

§3.3 #109,110,113,114,115,117,120,123,125,127,129,131,136

Problem A: Recall that in class we established the derivatives of the sine and cosine functions. Fill in those derivative rules below:

(a) $\dfrac{d}{dx}\,[\sin(x)] =$

(b) $\dfrac{d}{dx}\,[\cos(x)] =$

Problem B: Find the derivative of each function below.

(a) $f(x) = x^2 - 5\sin(x)$

(b) $J(\theta) = \dfrac{\theta \cos(\theta)}{5}$

(c) $H(t) = \dfrac{t+1}{t\sin(t)}$