Quiz 6.2 – Derivatives and Antiderivatives of Cosine and Sine

1. **(1 pt) alfredLibrary/AUCI/chapter6/lesson2/quiz/trigderiv11pet.pg**
Complete the derivative and integral formulas. Assume that x is measured in radians.

(a) $\frac{d}{dx}(\sin(x)) =$ _____

(b) $\frac{d}{dx}(\cos(x)) =$ _____

(c) $\int \sin(x)\,dx =$ _____

(d) $\int \cos(x)\,dx =$ _____

2. **(1 pt) alfredLibrary/AUCI/chapter6/lesson2/quiz/trigderiv22pet.pg**

(a) If $y = \frac{3+\sin x}{x+\cos x}$, then $y' =$ _____.

(b) If $y = e^{\cos(9x)}$, then $y' =$ _____.

3. **(1 pt) alfredLibrary/AUCI/chapter6/lesson2/quiz/trigderiv33pet.pg**
Evaluate each integral. Assume that x and t are measured in radians.

(a) $\int \cos(3.25x)\,dx =$ _____

(b) $\int_0^{\pi/4} \sin(4t)\,dt =$ _____