

Name _____ Student number _____ Quiz section: _____

1. Simplify $\sqrt{8} + \sqrt{8}$.

2. Evaluate

(a) $\sin \frac{\pi}{6} =$

(b) $\cos 0 =$

(c) $\tan \frac{\pi}{4} =.$

3. Write down the double angle formula for $\sin(2x)$ and $\cos(2x)$.

4. Find the derivative of the following functions:

(a) $\ln(3x^2)$:

(b) $e^{-x} \cos x$:

(c) $\sec x$:

5. Find the slope of the tangent line to the curve $y = \frac{\tan x}{3x+1}$ at the point $P(0, 0)$.