

Attendance Quiz 1

Name: _____ Date: _____

1. Show that the function f defined by $f(x) = 3e^{2x} - 2xe^{2x} - \cos 2x$ satisfies the differential equation

$$\frac{d^2y}{dx^2} - 4\frac{dy}{dx} + 4y = -8\sin 2x$$

and also the conditions that $f(0) = 2$ and $f'(0) = 4$.