Quiz No: 1

Name:_____ ID_____ Section_____ Marks: 8

Q1. Find a function $y = f(x)$, which satisfies $\dfrac{dy}{dx} = x\sqrt{x^2 + 12}$; $y(-2) = 0$

Q2. Verify that $y = \cosh x$ is a solution of $y'' - y = 0$.

Q3. The time rate of change of the velocity $\underline{v}$ of a speeding car is proportional to the 2/3rd power of $\underline{v}$.

Q4. Write $y'' + 2y' + y = x$ in its normal form.