

Problem 1:

Find a solution for $yy' = x$, $y(0) = 0$.

Is this solution unique? Explain.

Problem 2:

Is there a unique solution to $y'' + y' = x^2 + 5$, $y(0) = 1$? Explain.

Problem 3:

Is there a unique solution to $y' = x$, $y(0) = 0$, $y'(0) = 5$? Explain.

Problem 4:

(Optional, no points) What have you learned from this quiz?