

## Quiz 4

MATH 2280, ORDINARY DIFFERENTIAL EQUATIONS, FALL 2023

NAME:

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**Problem 1. Section 5.3b** (10 points) Find the solution the following initial-value problem using the techniques from Chapter 5.

$$\frac{dy}{dx} - 3y = 6 \quad y(0) = -2$$

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**Solution:**

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**Problem 2. Section 6.1b** (10 points) Use linear substitution as in Section 6.2 to find the solution of the following.

$$\frac{dy}{dx} = \frac{(3x - 2y)^2 + 1}{3x - 2y} + \frac{3}{2}$$

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**Solution:**