

QUIZ 7 - MATH 152

Friday, October 28

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Solve the initial value problem

$$t^2 \frac{dy}{dt} - t = 1 + y + ty, \quad y(1) = 0.$$

2. Solve the differential equation

$$e^{2x}y' = 1 - e^xy.$$