QUIZ 11 - MATH 112

Friday, December 3

YOUR NAME:_____

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

1. [8 points] Use the by-parts method to evaluate the following integrals:

   (a) $\displaystyle\int 2xe^{7x}dx$

   (b) $\displaystyle\int (3x + 7)(x - 10)^6 dx$

2. [4 points] Solve the initial value problem (differential equation and initial condition)

$$y' = xy^2, \quad y(2) = -\frac{1}{7}.$$