YOUR NAME:_____   George Voutsadakis

Read each problem **very carefully** before starting to solve it and do only what is asked. 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. [10 points] Solve the initial value problem

$$\frac{dy}{dt} = 5y + 13, \quad y(0) = 7, \quad y > 0.$$