

QUIZ 4

Problem 1. Find a general solution for the system

$$y_1' = 4y_1 + 2y_2, \quad y_2' = 3y_1 - y_2.$$

Problem 2. Find a general solution for the system

$$y_1' = -\frac{1}{2}y_1, \quad y_2' = \frac{1}{2}y_1 - \frac{1}{4}y_2, \quad y_3' = \frac{1}{4}y_2 - \frac{1}{5}y_3.$$

Problem 3 Find a a general solution for the system of equations

$$x' = 6x - 7y, \quad y' = x - 2y.$$

Problem 4 Find a general solution for the system

$$x' = -x + z, \quad y' = -y + z, \quad z' = -y - z.$$