## Math 3280 Worksheet 34: oscillating first-order systems

Group members (2 to 4):

(1) Solve the initial value problem

$$x'_{1} = -3x_{1} + 4x_{2}$$

$$x'_{2} = -4x_{1} - 3x_{2}$$

$$x_{1}(0) = 1$$

$$x_{2}(0) = 2.$$