

Name: _____ ID #: _____ Serial #: _____

1. Solve the system: $x' = 10y$, $y' = -10x$

2. Solve the system $X' = AX$ where $A = \begin{bmatrix} 3 & 2 & 2 \\ -5 & -4 & -2 \\ 5 & 5 & 3 \end{bmatrix}$, given that 3 is an eigenvalue of A .