

Solve these problems using the techniques discussed in class.

Set 3.3: 6, 8, 14.

Also, solve

$$\mathbf{y}' = A\mathbf{y}$$

where A equals to

1.

$$\begin{bmatrix} -1 & -2 & 1 \\ 2 & 2 & -1 \\ 0 & 2 & 1 \end{bmatrix}$$

2.

$$\begin{bmatrix} 21 & -\frac{37}{2} & 9 & \frac{9}{2} \\ 20 & -17 & 10 & 5 \\ -3 & \frac{7}{2} & -1 & \frac{1}{2} \\ -6 & 7 & 2 & -1 \end{bmatrix}$$