

Chapter 6

Section 6.2

Section 6.2.5

- Quiz 175: False
- Quiz 176: False
- Quiz 177: True
- Quiz 178: True
- Quiz 179: True
- Quiz 180: False
- Quiz 181: True
- Quiz 182: True
- Quiz 183: True
- Quiz 184: 1, 3, 4
- Quiz 185: False
- Quiz 186: True
- Quiz 187: 1, 3, 4
- Quiz 188: False
- Quiz 189: True

Section 6.2.6

Exercise 6.1:

1. Eigen values 2.7320508, -0.7320508 . Eigen vectors

$$\begin{bmatrix} 0.8660254 \\ 0.5000000 \end{bmatrix}, \begin{bmatrix} -0.8660254 \\ 0.5000000 \end{bmatrix}.$$

Yes.

2. Eigen values 5.464102, -1.464102 . Eigen vectors

$$\begin{bmatrix} 0.4209739 \\ 0.9070727 \end{bmatrix}, \begin{bmatrix} -0.4209739 \\ 0.9070727 \end{bmatrix}.$$

Yes.

3. Eigen values 4, 0. Eigen vectors

$$\begin{bmatrix} 0.4472136 \\ 0.8944272 \end{bmatrix}, \begin{bmatrix} -0.4472136 \\ 0.8944272 \end{bmatrix}.$$

No.

4. Eigen values 5, -1 . Eigen vectors

$$\begin{bmatrix} 0.4472136 \\ 0.8944272 \end{bmatrix}, \begin{bmatrix} -1 \\ 1 \end{bmatrix}.$$

Yes.

5. Eigen values 2.561553, -1.561553, 1. Eigen vectors

$$\begin{bmatrix} -0.8750489 \\ 0.4554783 \\ 0.1637954 \end{bmatrix}, \begin{bmatrix} 0.5644704 \\ -0.4819736 \\ 0.6701303 \end{bmatrix}, \begin{bmatrix} -7.071068e^{-01} \\ -1.440816e^{-16} \\ 7.071068e^{-01} \end{bmatrix}.$$

Yes.

Section 6.3

Section 6.3.5

- Quiz 190: True
- Quiz 191: False
- Quiz 192: True
- Quiz 193: True
- Quiz 194: True
- Quiz 195: True
- Quiz 196: False
- Quiz 197: False