

$$1. (a) X = \begin{pmatrix} 90 & 51 & -60 \\ 51 & 73 & -55 \\ -60 & -55 & 50 \end{pmatrix}.$$

$$(b) X = \begin{pmatrix} 117 & -54 \\ -54 & 41 \end{pmatrix}.$$

$$(c) X = \begin{pmatrix} 77 & 23 & -43 \\ 23 & 58 & -20 \\ -43 & -20 & 86 \end{pmatrix}.$$

$$2. (a) X = \begin{pmatrix} 40 & 50 & 46 \\ 50 & 65 & 48 \\ 46 & 48 & 89 \end{pmatrix}.$$

$$(b) X = \begin{pmatrix} 14 & 37 \\ 37 & 98 \end{pmatrix}.$$

$$(c) X = \begin{pmatrix} 29 & 36 & 0 \\ 36 & 94 & 67 \\ 0 & 67 & 93 \end{pmatrix}.$$

$$3. (a) X = \begin{pmatrix} 61 & 19 & 47 \\ 19 & 17 & 27 \\ 47 & 27 & 50 \end{pmatrix}.$$

$$(b) X = \begin{pmatrix} 29 & -10 \\ -10 & 76 \end{pmatrix}.$$

$$(c) X = \begin{pmatrix} 101 & 23 & 39 \\ 23 & 81 & -81 \\ 39 & -81 & 170 \end{pmatrix}.$$

$$4. (a) X = \begin{pmatrix} 58 & -1 & -10 \\ -1 & 29 & 3 \\ -10 & 3 & 2 \end{pmatrix}.$$

$$(b) X = \begin{pmatrix} 69 & -44 \\ -44 & 57 \end{pmatrix}.$$

$$(c) X = \begin{pmatrix} 209 & 140 & -19 \\ 140 & 113 & -7 \\ -19 & -7 & 107 \end{pmatrix}.$$

$$5. (a) X = \begin{pmatrix} 17 & 19 & -2 \\ 19 & 58 & -14 \\ -2 & -14 & 4 \end{pmatrix}.$$

$$(b) X = \begin{pmatrix} 121 & 39 \\ 39 & 131 \end{pmatrix}.$$

$$(c) \ X = \begin{pmatrix} 177 & -58 & -46 \\ -58 & 88 & -44 \\ -46 & -44 & 84 \end{pmatrix}.$$