

pg. 539) 1-9 odd, 11-14, 45, 46 *#s underlined are non-calc

① 2×3 ③ 3×2 ⑤ 3×1 ⑦ 3 ⑨ 4

⑪ a) $\begin{bmatrix} 3 & 0 \\ -3 & 1 \end{bmatrix}$ b) $\begin{bmatrix} 1 & 6 \\ 1 & 9 \end{bmatrix}$ c) $\begin{bmatrix} 6 & 9 \\ -3 & 15 \end{bmatrix}$ d) $\begin{bmatrix} 1 & 15 \\ 4 & 22 \end{bmatrix}$

⑫ a) $\begin{bmatrix} 1 & 1 & 2 \\ 3 & 1 & 1 \\ 6 & -3 & 0 \end{bmatrix}$ b) $\begin{bmatrix} -3 & -1 & 2 \\ 5 & 1 & -3 \\ -2 & 3 & 2 \end{bmatrix}$ c) $\begin{bmatrix} -3 & 0 & 6 \\ 12 & 3 & -3 \\ 6 & 0 & 3 \end{bmatrix}$ d) $\begin{bmatrix} -8 & -3 & 4 \\ 11 & 2 & -8 \\ -8 & 9 & 5 \end{bmatrix}$

⑬ a) $\begin{bmatrix} 1 & 1 \\ -2 & 0 \\ -1 & 0 \end{bmatrix}$ b) $\begin{bmatrix} -7 & 1 \\ 2 & -2 \\ 5 & 2 \end{bmatrix}$ c) $\begin{bmatrix} -9 & 3 \\ 0 & -3 \\ 6 & 3 \end{bmatrix}$ d) $\begin{bmatrix} -18 & 2 \\ 6 & -5 \\ 13 & 5 \end{bmatrix}$

⑭ a) $\begin{bmatrix} 3 & 1 & 4 & 1 \\ 3 & 0 & 1 & 0 \end{bmatrix}$ b) $\begin{bmatrix} 7 & -5 & 2 & 1 \\ -5 & 0 & 3 & 4 \end{bmatrix}$ c) $\begin{bmatrix} 15 & -6 & 9 & 3 \\ -3 & 0 & 6 & 6 \end{bmatrix}$ d) $\begin{bmatrix} 16 & -13 & 3 & 2 \\ -14 & 0 & 7 & 10 \end{bmatrix}$

⑮ a) the distance b/t 2 cities is the same regardless of the starting point
b) each 0 represents the distance from a city to itself

⑯ $\begin{bmatrix} 132 & 77 \\ 165 & 121 \\ 88 & 176 \end{bmatrix}$ each element in B is 1.1 larger than each element in A