

[08-10-10B-T11]
Matrix Inverse

■ Find the inverse or state that it does not exist

$$[1] \quad \begin{pmatrix} 3 & 5 \\ 1 & -5 \end{pmatrix}$$

$$[2] \quad \begin{pmatrix} 2 & 3 \\ 7 & 0 \end{pmatrix}$$

$$[3] \quad \begin{pmatrix} 2 & 1 \\ 0 & 2 \end{pmatrix}$$

$$[4] \quad \begin{pmatrix} 0 & 2 \\ 5 & 4 \end{pmatrix}$$

$$[5] \quad \begin{pmatrix} 3 & 2 \\ 4 & 5 \end{pmatrix}$$

$$[6] \quad \begin{pmatrix} 2 & 2 \\ -1 & -5 \end{pmatrix}$$

■ Answers

$$[1] \quad \left\{ \left\{ \frac{1}{4}, \frac{1}{4} \right\}, \left\{ \frac{1}{20}, -\frac{3}{20} \right\} \right\}$$

$$[2] \quad \left\{ \left\{ 0, \frac{1}{7} \right\}, \left\{ \frac{1}{3}, -\frac{2}{21} \right\} \right\}$$

$$[3] \quad \left\{ \left\{ \frac{1}{2}, -\frac{1}{4} \right\}, \left\{ 0, \frac{1}{2} \right\} \right\}$$

$$[4] \quad \left\{ \left\{ -\frac{2}{5}, \frac{1}{5} \right\}, \left\{ \frac{1}{2}, 0 \right\} \right\}$$

$$[5] \quad \left\{ \left\{ \frac{5}{7}, -\frac{2}{7} \right\}, \left\{ -\frac{4}{7}, \frac{3}{7} \right\} \right\}$$

$$[6] \quad \left\{ \left\{ \frac{5}{8}, \frac{1}{4} \right\}, \left\{ -\frac{1}{8}, -\frac{1}{4} \right\} \right\}$$