

Complete the indicated operations.

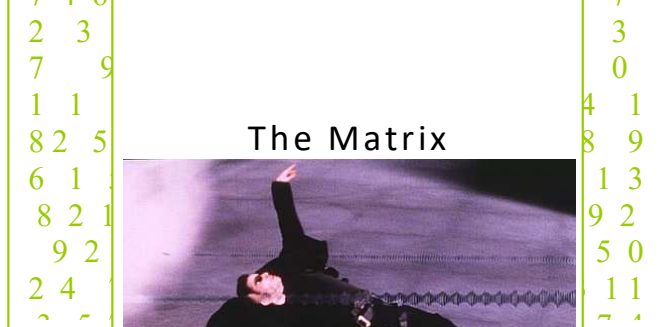
$$1. \begin{bmatrix} 4 & 2 & 3 \\ 1 & 0 & 5 \end{bmatrix} + \begin{bmatrix} 6 & -3 & 4 \\ 6 & 2 & 0 \end{bmatrix}$$

$$2. \begin{bmatrix} 3 & -5 \\ 2 & 1 \end{bmatrix} + \begin{bmatrix} 3 & -1 \\ 0 & 2 \\ 1 & 8 \end{bmatrix}$$

$$3. \begin{bmatrix} 8 & 5 \\ -2 & 3 \\ 1 & -7 \end{bmatrix} - \begin{bmatrix} 5 & -4 \\ 3 & 9 \\ -1 & 2 \end{bmatrix}$$

$$4. 4 \begin{bmatrix} -2 & 8 \\ 11 & 6 \end{bmatrix}$$

$$5. 3 \begin{bmatrix} 4 & -1 \end{bmatrix} + 2 \begin{bmatrix} 5 & -2 \end{bmatrix}$$



Find the determinant for each matrix.

$$6. \begin{vmatrix} 15 & 3 \\ 8 & 4 \end{vmatrix}$$

$$7. \begin{vmatrix} 12 & -14 \\ 2 & 7 \end{vmatrix}$$

$$8. \begin{vmatrix} -1 & 9 \\ 3 & 5 \end{vmatrix}$$

Solve using a matrix.

$$9. \begin{aligned} 3x + 4y &= 2 \\ 5x - 7y &= 17 \end{aligned}$$

$$10. \begin{aligned} 2x + 3y &= 2 \\ 4x - 9y &= -1 \end{aligned}$$