

Matrix Multiplication

Simplify. Write "undefined" for expressions that are undefined.

$$1) \begin{bmatrix} 0 & 2 \\ -2 & -5 \end{bmatrix} \cdot \begin{bmatrix} 6 & -6 \\ 3 & 0 \end{bmatrix}$$

$$\begin{bmatrix} 6 & 0 \\ -27 & 12 \end{bmatrix}$$

$$2) \begin{bmatrix} 6 \\ -3 \end{bmatrix} \cdot \begin{bmatrix} -5 & 4 \end{bmatrix}$$

$$\begin{bmatrix} -30 & 24 \\ 15 & -12 \end{bmatrix}$$

$$3) \begin{bmatrix} -5 & -5 \\ -1 & 2 \end{bmatrix} \cdot \begin{bmatrix} -2 & -3 \\ 3 & 5 \end{bmatrix}$$

$$\begin{bmatrix} -5 & -10 \\ 8 & 13 \end{bmatrix}$$

$$4) \begin{bmatrix} -3 & 5 \\ -2 & 1 \end{bmatrix} \cdot \begin{bmatrix} 6 & -2 \\ 1 & -5 \end{bmatrix}$$

$$\begin{bmatrix} -13 & -19 \\ -11 & -1 \end{bmatrix}$$

$$5) \begin{bmatrix} 0 & 5 \\ -3 & 1 \\ -5 & 1 \end{bmatrix} \cdot \begin{bmatrix} -4 & 4 \\ -2 & -4 \end{bmatrix}$$

$$\begin{bmatrix} -10 & -20 \\ 10 & -16 \\ 18 & -24 \end{bmatrix}$$

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

$$\begin{bmatrix} -14 & -3 \\ -19 & 22 \end{bmatrix}$$

$$7) \begin{bmatrix} -5 \\ 6 \\ 0 \end{bmatrix} \cdot \begin{bmatrix} 3 & -1 \end{bmatrix}$$

$$\begin{bmatrix} -15 & 5 \\ 18 & -6 \\ 0 & 0 \end{bmatrix}$$

$$8) \begin{bmatrix} 3 & 2 & 5 \\ 2 & 3 & 1 \end{bmatrix} \cdot \begin{bmatrix} 4 & 5 & -5 \\ 5 & -1 & 6 \end{bmatrix}$$

Undefined

Solving Inequalities

Solve each inequality and graph its solution.

1) $0 > 3x - 3 - 6$



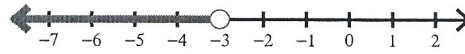
2) $4x + 1 - 1 \geq -8$



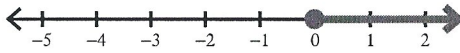
3) $-1 \leq 2n + 4 - 5$



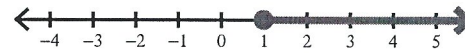
4) $-6 > 5n + 5 + 4$



5) $0 \leq 2n + 3n$



6) $2p - 4p \leq -2$



7) $7 < -(-k - 3) + 2$



8) $3 - 2(n - 4) > -1$



9) $-5(1 - 4a) > -5$



10) $-2(b + 1) + 4 < 10$

