

## Matrix Operations Warm-up

1. Name the dimensions of each matrix.

$$A = \begin{bmatrix} -1 & 3 & 5 \\ 8 & -2 & 1 \end{bmatrix}$$

$$B = \begin{bmatrix} -4 \\ 3 \\ 2 \\ 1 \end{bmatrix}$$

2. 
$$3 \begin{bmatrix} -2 & 1 \\ 5 & 0 \\ 3 & -4 \end{bmatrix} - \frac{1}{2} \begin{bmatrix} -4 & 8 \\ 6 & 0 \\ -6 & 10 \end{bmatrix} =$$

3. Solve for x and y.

$$\begin{bmatrix} 3x & -2 \\ -1 & 8 \end{bmatrix} + \begin{bmatrix} -4 & 0 \\ -7 & -8 \end{bmatrix} = \begin{bmatrix} -16 & -2 \\ y & 0 \end{bmatrix}$$