Bellwork

5th hr Alg 2A Tuesday, January 10, 2017

Enter these matrices on the graphing calculator then use them to answer the questions on this bellwork.

$$A\begin{bmatrix} 6 & 1 \\ -3 & 4 \end{bmatrix}$$

$$\begin{bmatrix}
-9 & 10 \\
2 & 0 \\
7 & 5
\end{bmatrix}$$

$$A\begin{bmatrix} 6 & 1 \\ -3 & 4 \end{bmatrix} B\begin{bmatrix} -9 & 10 \\ 2 & 0 \\ 7 & 5 \end{bmatrix} C\begin{bmatrix} -4 & 1 \\ 8 & 12 \\ -14 & 9 \end{bmatrix} D\begin{bmatrix} 7 & -7 \\ -6 & 1 \end{bmatrix} E\begin{bmatrix} 15 & -1 \\ 0 & 20 \end{bmatrix}$$

$$D \begin{bmatrix} 7 & -7 \\ -6 & 1 \end{bmatrix}$$

$$\mathsf{E} \left[ \begin{array}{cc} 15 & -1 \\ 0 & 20 \end{array} \right]$$

Find each resulting matrix.

1. 
$$A - 2D$$

2. 
$$3B + 2C$$

3. 
$$A - (D + E)$$

4. Solve each equation for Matrix X

a) 
$$3C - X = B$$

b) 
$$-2X + 2D = E$$

Bellwork 4th hr Alg 2A Monday, January 9, 2017

Enter these matrices on the graphing calculator then use them to answer the questions on this bellwork.

$$A\begin{bmatrix} 6 & 1 \\ -3 & 4 \end{bmatrix}$$

$$B \begin{bmatrix} -9 & 10 \\ 2 & 0 \\ 7 & 5 \end{bmatrix}$$

$$\begin{bmatrix}
-9 & 10 \\
2 & 0 \\
7 & 5
\end{bmatrix}
\quad
\begin{bmatrix}
-4 & 1 \\
8 & 12 \\
-14 & 9
\end{bmatrix}
\quad
\begin{bmatrix}
7 & -7 \\
-6 & 1
\end{bmatrix}
\quad
\begin{bmatrix}
15 & -1 \\
0 & 20
\end{bmatrix}$$

$$D \begin{bmatrix} 7 & -7 \\ -6 & 1 \end{bmatrix}$$

$$\mathsf{E} \left[ \begin{array}{ccc} 15 & -1 \\ 0 & 20 \end{array} \right]$$

Find each resulting matrix.

1. 
$$A - 2D$$

**2**. 
$$3B + 2C$$

3. 
$$A - (D + E)$$

4. Solve each equation for Matrix X

a) 
$$3C - X = B$$

b) 
$$-2X + 2D = E$$

Alg ZA John Lour Bellwak Answers

(1) 
$$A-2D = \begin{bmatrix} -6 & 15 \\ 9 & 2 \end{bmatrix}$$
 (2)  $3B+2C = \begin{bmatrix} -35 & 32 \\ 22 & 24 \\ -7 & 33 \end{bmatrix}$ 

(3) 
$$A - (D + E) = \begin{pmatrix} -169 \\ 3 - 17 \end{pmatrix}$$

b) 
$$-2X + 2D = E$$
  
 $-\frac{1}{2}(-2X) = (E - 2D)^{-\frac{1}{2}}$   
 $X = -\frac{1}{2}(E - 2D) = \begin{bmatrix} -.5 & -6.5 \\ -6 & -9 \end{bmatrix}$