

Review Matrices 2 - Graphing Calculator

$$1. 3(A-C) = \begin{bmatrix} -27 & 18 \\ -9 & 21 \end{bmatrix}$$

$$2. |D| = -12$$

$$3. -\frac{1}{2}(AD) = \begin{bmatrix} -\frac{29}{2} & \frac{35}{2} & -9 \\ 5 & -\frac{25}{2} & 3 \end{bmatrix}$$

$$4. C^{-1} = \text{does not exist} \\ \det = 0$$

$$5. B^2 = \begin{bmatrix} -8 & -3 \\ 4 & -11 \end{bmatrix}$$

$$6. D^{-1} = \begin{bmatrix} -1/3 & -2/3 & -2/3 \\ 1/6 & -1/6 & -1/6 \\ 11/12 & 13/12 & 7/12 \end{bmatrix}$$

$$7. |B| = 10$$

$$8. 2A - 3B + C = \begin{bmatrix} -6 & 9 \\ -9 & 11 \end{bmatrix}$$

$$9. \begin{bmatrix} 8+6y & 2 \\ -10 & 2x \end{bmatrix} + \begin{bmatrix} 1 & 6-5z \\ 2 & 4 \end{bmatrix} = \begin{bmatrix} y-3 & 3 \\ -8 & -2 \end{bmatrix}$$

$$2x + 4 = -2$$

$$2x = -6$$

$$\boxed{x = -3}$$

$$8 + 6y + 1 = y - 3$$

$$6y + 9 = y - 3$$

$$5y = -12$$

$$\boxed{y = -12/5}$$

$$2 + 6 - 5z = 3$$

$$8 - 5z = 3$$

$$-5z = -5$$

$$\boxed{z = 1}$$

$$10. 2x - (-12) = 6 - 3x$$

$$2x + 12 = 6 - 3x$$

$$5x = -6$$

$$\boxed{x = -6/5}$$

$$11. (20x + 0 + 3x) - (-2x + 0 + 10x) = 15$$

$$23x - 8x = 15$$

$$15x = 15$$

$$\boxed{x = 1}$$

$$12. \begin{bmatrix} 1 & 1 \\ 2 & -1 \end{bmatrix} \cdot \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -6 \\ 2 \end{bmatrix}$$

$$\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -4/3 \\ -14/3 \end{bmatrix}$$

$$13. \begin{bmatrix} 4 & -2 \\ 7 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 6 \\ 15 \end{bmatrix}$$

$$\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 2 \\ 1 \end{bmatrix}$$

14.
$$\begin{bmatrix} 3 & 1 & 2 \\ 6 & -12 & 0 \\ 3 & 1 & -2 \end{bmatrix} \cdot \begin{bmatrix} a \\ b \\ c \end{bmatrix} = \begin{bmatrix} 6 \\ 2 \\ 0 \end{bmatrix}$$

$$\begin{bmatrix} a \\ b \\ c \end{bmatrix} = \begin{bmatrix} 2/3 \\ 1 \\ 1/2 \end{bmatrix}$$

15.

	W	L
Braves	59	29
Marmers	37	51
Cubs	48	39

16.

<p>(A)</p> <p>3x4</p> <p>5x3</p> <p>5x4</p> <p>8x5</p>	<p>(B)</p> <p>4x5</p> <p>5x3</p> <p>4x1</p> <p>5x3</p>	<p>(AB)</p> <p>3x5</p> <p>not possible</p> <p>5x1</p> <p>8x3</p>
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