

Test Review

Sub: $y = -3x + 4$
 $y = 3x - 2$
 $3x - 2 = -3x + 4$
 $6x = 6$
 $x = 1$

$y = 3(1) - 2$
 $y = 1$
 $(1, 1)$

Elim: $y = -3x + 4$
 $+ y = 3x - 2$

 $2y = 2$
 $y = 1$

$1 = 3x - 2$
 $3 = 3x$
 $x = 1$
 $(1, 1)$

Elim: $8x + y = -16$
 $+ 3x - y = +5$

 $11x = -11$
 $x = -1$

$-3(-1) + y = -5$
 $3 + y = -5$
 $y = -8$
 $(-1, -8)$

Sub: $8x + y = -16$ $-3x + y = -5$
 $8x + (3x - 5) = -16$ $y = 3x - 5$
 $11x - 5 = -16$
 $11x = -11$
 $x = -1$

$-3(-1) + y = -5$
 $3 + y = -5$
 $y = -8$
 $(-1, -8)$

19. $\begin{bmatrix} t \\ -r - 4t \\ 6s - 3r + 2 \end{bmatrix}$

20. $\begin{bmatrix} 2 - 5 - 3y \\ -6 + 3z \\ 4 - 5z \\ 3y + 4z \end{bmatrix}$

21. $[30 \ 5 \ 10 \ -30] - [1 \ 6 \ -6 \ 6] =$
 $[29 \ -1 \ 16 \ -36]$

22. $-5 [2 \ -2 \ 7] = [-10 \ 10 \ -35]$

23. $\begin{bmatrix} 11 & 3 \\ 4 & 5 \end{bmatrix} - \begin{bmatrix} 5 & 4 \\ -2 & -6 \end{bmatrix} =$
 $\begin{bmatrix} 6 & -1 \\ 6 & 11 \end{bmatrix}$

24. $\begin{bmatrix} 1 & 1 \\ 6 & -4 \\ 0 & 0 \end{bmatrix} + \begin{bmatrix} -20 & 30 \\ 5 & 5 \\ -20 & 5 \end{bmatrix} = \begin{bmatrix} -19 & 31 \\ 11 & 1 \\ -20 & 5 \end{bmatrix}$

1. $\begin{bmatrix} 0 & 2 \\ -2 & -5 \end{bmatrix} \cdot \begin{bmatrix} 6 & -6 \\ 3 & 0 \end{bmatrix} = \begin{bmatrix} 6 & 0 \\ -27 & 12 \end{bmatrix}$

$0(6) + 2(3) = 6$

$0(-6) + 2(0) = 0$

$-2(6) + (-5)(3) = -12 - 15 = -27$

$-2(-6) + (-5)(0) = 12$

2. $\begin{bmatrix} 6 \\ -3 \end{bmatrix} \cdot \begin{bmatrix} -5 & 4 \end{bmatrix} = \begin{bmatrix} -30 & 24 \\ 15 & -12 \end{bmatrix}$

$6(-5) = -30$

$-3(4) = -12$

$6(4) = 24$

$-3(-5) = 15$

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

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