For Questions 21 and 22, use the matrices below.

$$A = \begin{bmatrix} 17 & 2 & 3 \\ 11 & 4 & -9 \end{bmatrix} \qquad B = \begin{bmatrix} 10 & 6 & -7 \\ -4 & 3 & 0 \end{bmatrix} \qquad C = \begin{bmatrix} -1 \\ 2 \\ -2 \end{bmatrix}$$

21. Find $A - B$.

22. Find BC, if possible.

23. Solve the system of inequalities by graphing.

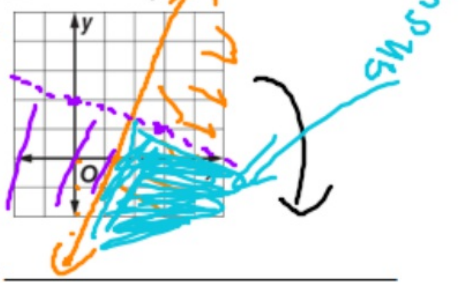
$$4x - y \geq 4$$
$$3y < -x + 6$$

24. Evaluate $\begin{vmatrix} 12 & 5 & -2 \\ -3 & 0 & 1 \\ -5 & 4 & 2 \end{vmatrix}$ using diagonals.

25. **6.** $\sqrt{12} - \sqrt{18} + 3\sqrt{50} + \sqrt{75}$

20. _____

21. _____

22. 

23. _____

24. _____

$$2\sqrt{3} - 3\sqrt{2} + 15\sqrt{2} + 5\sqrt{3}$$

$$= 7\sqrt{3} - 12\sqrt{2}$$

25

$3x - 5y = 21$

$4x + 2y = -2$

x y answer

$$y = \frac{\begin{vmatrix} 3 & 21 \\ 4 & -2 \end{vmatrix}}{\begin{vmatrix} 3 & -5 \\ 4 & 2 \end{vmatrix}}$$

26

$4m - 5n = 32$

$1m + 2n = -5$

then solve

24. Evaluate $\begin{vmatrix} 12 & 5 & -2 \\ -3 & 0 & 1 \\ -5 & 4 & 2 \end{vmatrix}$

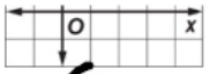
0 −25 +24 = −1

48 −30 = 18

−1 −18 = −19

25. Use Cramer's Rule to set up the solution for y of equations $3x - 5y = 21$ and $4x + 2y = 2$. *Do not solve.*

26. Solve the matrix equation $\begin{bmatrix} 4 & -5 \\ 1 & 2 \end{bmatrix} \cdot \begin{bmatrix} m \\ n \end{bmatrix} = \begin{bmatrix} 32 \\ -5 \end{bmatrix}$ using the inverse matrices.



23. C

24. −19

25.

26. (3, −4)