

For Questions 21 and 22, use the matrices below.

$$A = \begin{bmatrix} 17 & 2 & 3 \\ 11 & 4 & -9 \end{bmatrix}$$

$$B = \begin{bmatrix} 10 & 6 & -7 \\ -4 & 3 & 0 \end{bmatrix}$$

$$C = \begin{bmatrix} -1 \\ 2 \\ -2 \end{bmatrix}$$

$$\begin{cases} -10 + 12 + 14 \\ 4 + 6 + 0 \end{cases}$$

21. Find $A - B$.

$$\begin{array}{r} 17 - 10 \quad 2 - 6 \quad 3 - (-7) \\ 11 - 4 \quad 4 - 3 \quad -4 - 0 \end{array}$$

22. Find BC , if possible.

$$\begin{aligned} y &\leq 4x - 4 \\ 4x - y &\geq 4 \\ 3y &< -x + 6 \\ y &< -\frac{1}{3}x + 2 \end{aligned}$$

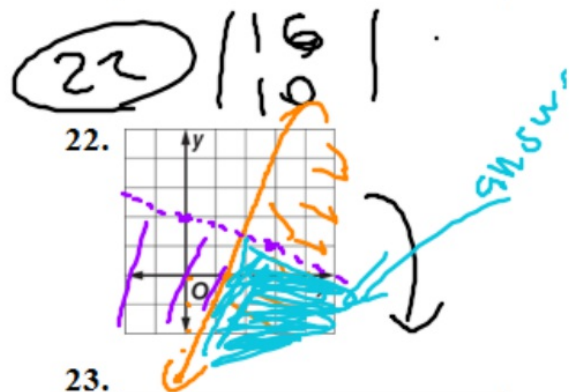
23. Solve the system of inequalities by graphing.

20. _____

21. _____

$$\begin{vmatrix} 17 & -4 & 10 \\ 11 & 1 & -9 \end{vmatrix}$$

22. _____



23. _____

24. _____

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

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

$$\begin{aligned} & \textcircled{6} \quad 2\sqrt{3} - 3\sqrt{2} + 15\sqrt{2} + 5\sqrt{3} \\ & = 7\sqrt{3} - 12\sqrt{2} \end{aligned}$$

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$$\begin{cases} 3x - 5y = 21 \\ 4x + 2y = -2 \end{cases} \quad \text{answer}$$

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

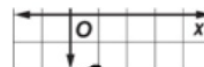
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$$\begin{cases} 4m - 5n = 32 \\ 1m + 2n = -5 \end{cases}$$

then solve 😊

$$\begin{aligned} 0 - 25 + 24 &= -1 \\ 48 - 30 &= 18 \\ -1 - 18 &= -19 \end{aligned}$$

24. Evaluate $\begin{vmatrix} 12 & 5 & -2 & 12 & 5 \\ -3 & 0 & 1 & 3 & 9 \\ -5 & 4 & 2 & -5 & 4 \end{vmatrix}$



23.  _____

24. -19

25. _____

26. (3, -4)

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.