

What's Going On?

Checking In

F.F.M.

Minds on

Solve the System

Action!

The Eliminator

Consolidation

Piecing it Together

Learning Goal - I will be able to solve linear systems by elimination.

Checking In

This Week

Monday - Elimination

Tuesday - Creating Equations

Wednesday - Solving Problems

Thursday - Homework Help Registration
TIPS assignment

Checking In

Next Week

Tuesday - Review

Wednesday - Test (TIPS DUE)

 Minds on

Solve the System

$$3x + 2y = 19 \quad (1)$$

$$5x - 2y = 5 \quad (2)$$

Action!

The Eliminator

Solve the system.

$$\begin{array}{r} \boxed{3x + 2y = 19} \quad (1) \\ + \quad 5x - 2y = 5 \quad (2) \\ \hline \end{array}$$
$$\begin{array}{r} \cancel{8}x = 24 \\ \hline \cancel{8} \quad \quad 8 \\ x = 3 \end{array}$$
$$\begin{array}{r} 5(3) - 2y = 5 \\ 15 - 2y = 5 \\ \hline -15 \quad \quad -15 \\ -2y = -10 \\ \hline -2 \quad \quad -2 \\ y = 5 \end{array}$$

Action!

The Eliminator

Solve the system.

$$5p + 3q = -19 \quad (1)$$

$$2p - 5q = 11 \quad (2)$$

$$\begin{array}{r} (1) \times 2 \\ (2) \times 5 \\ \hline 10p + 6q = -38 \quad (3) \\ -10p - 25q = 55 \quad (4) \\ \hline \end{array}$$

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$$3q = -93$$

$$q = -31$$

$$8c - 3d = -10 \quad \textcircled{1}$$

$$2c - 5d = 6 \quad \textcircled{2}$$

Multiply $\textcircled{2}$ by 4.

$$\underline{4(2c - 5d)} = \underline{4(6)}$$

$$8c - 20d = 24 \quad \textcircled{3}$$

Subtract ① from ③

$$\begin{array}{r} 8c - 20d = 24 \quad \textcircled{3} \\ - (8c - 3d = -10) \quad \textcircled{1} \\ \hline \end{array}$$

$$\begin{array}{r} -17d = 34 \\ \hline -17 \quad -17 \\ \hline d = -2 \end{array}$$

Substitute $d = -2$ into ① or ②

$$8c - 3d = -10$$

$$8c - 3(-2) = -10$$

$$8c + \cancel{6} = -10$$

$$\begin{array}{r} +6 \quad -6 \\ 8c = -16 \\ \hline c = -2 \end{array}$$

Consolidation

Piecing it Together

Form groups of 4. (group your desks)

When I say "go", open your envelope and put the solution in order.

When you are done, have someone stand up.
I will come check.

DO NOT WRITE ON THE SLIPS!

Consolidation

Homework

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