

Watch. Practice. Understand. | Lesson 005

The Secret of Solving System of Linear Equations and Inequalities Students Must Know

Watch the matching video: <https://www.youtube.com/watch?v=MpKir3Z60H4>

Practice focus: Systems of equations and inequalities

Original extra practice matched to the listed lesson topic.

Name: _____ Date: _____ Show your reasoning and check units.

01 Solve $x + y = 9$ and $2x - y = 6$.

02 Solve $3x + 2y = 16$ and $x - y = 2$.

03 Does $(2, 3)$ satisfy $y \geq x + 1$ and $x + y < 8$?

04 A shop sells 20 drinks: \$3 juice and \$2 water. Revenue is \$48. Find each count.

Worked answers | Lesson 005

The Secret of Solving System of Linear Equations and Inequalities Students Must Know

Watch the matching video: <https://www.youtube.com/watch?v=MpKir3Z60H4>

Practice focus: Systems of equations and inequalities

Original extra practice matched to the listed lesson topic.

01 Solve $x + y = 9$ and $2x - y = 6$.

Add equations: $3x = 15$, so $x = 5$ and $y = 4$.

02 Solve $3x + 2y = 16$ and $x - y = 2$.

$y = x - 2$. Then $5x - 4 = 16$, so $x = 4$ and $y = 2$.

03 Does $(2, 3)$ satisfy $y \geq x + 1$ and $x + y < 8$?

$3 \geq 3$ and $5 < 8$ are both true, so yes.

04 A shop sells 20 drinks: \$3 juice and \$2 water. Revenue is \$48. Find each count.

$j + w = 20$ and $3j + 2w = 48$. Subtract twice the first equation: $j = 8$, $w = 12$.