

DO NOW

Recall the 3 Types of Systems:

1. Consistent and independent
↳ one point of intersection
Answer: (x, y)
2. consistent and dependent
↳ same line with different names
Answer: Infinite solutions
3. Inconsistent
↳ parallel lines
Answer: No solution

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5.3 Mixed Solving for Systems of Linear Equations

3 methods for solving:

1. Graphing Method
- find point of intersection
2. Substitution Method
GOOD → if one equation is " $y =$ " or " $x =$ "
BAD → if no coefficient of 1.
3. Addition (or elimination) Method
GOOD → opposite coefficients in $Ax + By = C$ form

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Which method would be a good choice to solve the following?

- | | |
|---|--|
| 1. $3x - y = 13$
$2x + 3y = 16$
Addition or
Substitution | 2. $y = x - 2$
$3x - y = 16$
Substitution |
| 3. $3a + 5b = 11$
$-2a + 3b = 18$
Addition | 4. $x + y = 0$
$y - x = 6$
Addition or
Substitution |
| 5. $2x + 3y = 7$
$4x - 5y = 25$
Addition | 6. $y = 2x$
$x + y = 21$
Substitution |

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HOMEWORK

Worksheet - HW 5.3
Mixed Solving

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