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From Sections 5.1.1 and 5.1.2

1. **SOLVE**: you should be able to find the all the solutions of two relations when they are equal to each other.

2. **CHECK**: you should check your answer to eliminate answers that don't really make sense.

Questions?

Sections 5.1.3

Solving systems of equations.

IC 5-33 to 5-35

HW 5-37 to 5-43

5-33

Solve algebraically

$y = -3x + 5$

$y = -3x - 1$

5-33

Solve algebraically

$y = \frac{1}{2}x^2 + 1$

$y = 2x - 1$

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Solve algebraically

$y^2 = x$

$y = x - 2$

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5-33

Solve algebraically

$4x - 2y = 10$

$y = 2x - 5$

5-34

Consider this system:

$x^2 + y^2 = 25$

$y = x^2 - 13$

How many solutions could it have?

5-34

Solve this graphically

$x^2 + y^2 = 25$

$y = x^2 - 13$

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Solve algebraically

$x^2 + y^2 = 25$

$y = x^2 - 13$

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Can you alter these equations so that there are **0, 1**, **2**, or **3** solutions? Share.

$x^2 + y^2 = 25$
$y = x^2 - 13$

HW 5-37 to 5-43

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