Elimination 1.31.17 Lesson 28

Warm up: How many seconds are in a year? How many tenths of a second are in a year?

We know we can solve systems of equations without graphing. But there is more than one method in solving.

Given the equations
$$6x - 5y = 21$$
$$2x + 5y = -5$$

You try
3x+2y=16
4x-2y=12

Do you notice anything similar between the two equations? The 5ys

We can solve this by combination/elimination method. We are going to add the two equations together which will make the 5s cancel out.
Then we can easily solve for x. And once we have x we can substitute it in to solve for y.

Solve:
$$-2x + 7y = 5$$
$$4x - 2y = 14$$

You try
-4x+7y=-5
8x+2y =34

Solve
$$7x - 5y = -2$$
$$3x - 3y = 7$$

You try

3x-5y=-7
4x+4y=12

Homework: Mod 4, Lesson 28, Exercises 1-3