Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Think**

Solve this system of equations. Pick any method you’d like (linear combination, substitution, or graphing) and explain why you choose this method.

1. $ 4x-3y=11$
2. $y=-4x-1$

Does your answer change if the second equation is: $4x+y=-1$ ? What method would you use if this was the second equation and why?

**Talk**

**Talk Idea**

**Talk Idea**

1. Linear combination:
* X-coefficient is 4, so you can rearrange the 2nd equation into standard form and multiply by (-1) and it’s easy to combine
1. Linear Combination
* Both in standard form, so just multiply 2nd equation by (-1) and then you can easily add them and get rid of y
1. Substitution:
* 2nd equation is y= form so I can use easily substitute that in for the y in the 1st equation
1. Substitution
* Change into y-intercept form and then it’s easy to substitute
1. Graphing:
* 1st equation- just find slope and y-intercept and graph
* 2nd equation is already in y-int form, so easy to graph
1. Graphing
* Standard form: just find slope and y-intercept and graph

We Understand

* You can solve systems using ANY method
* Some methods may be easier/faster to use
*