1) Consider the equations; $2x + 1 = 7$ $+ (x - 2 = 1)$ What happens if the equations are added to one another? Does "x" still equal 3?

2) Consider the equations; $2x + 1 = 7$ $- (x - 2 = 1)$ What happens if the equations are subtracted from one another? Does "x" still equal 3?

3) The following system has a solution of (4, 3). Verify this is true using substitution, and graph both lines using Desmos.

$4x + 3y = 252x + 3y = 17$

4) Add the two equations together in the system from #3 to create a new linear equation. Is the coordinate (4, 3) still a solution? Graph this third line using Desmos.

5) Subtract the second equation from the first in the system from #3 to create a new linear equation. Is the coordinate (4, 3) still a solution? Graph this fourth line using Desmos.

6) #5 illustrates the **Elimination Method** of solving systems of equations. Look again at your process, and the result of subtraction. Why do you think we call this the "elimination method"?

7) Solve the system by subtracting the two equations.

8) Solve the system by adding the two equations.

9) Solve the system by addition or subtraction of the two equations.

10) Solve the following systems and verify your solutions.