

1
Linear Systems
The Method of Substitution

2
Warm Up
1. What is the solution to the following linear system?
 $y = 1/2x - 2$ and $y = 3/4x + 3$

3
2. The Abby's owns a candy store. They sell hard candy for \$2/kg and soft candy for \$4/kg. How can they mix the two kinds of candy to create 60kg of a mixture that they can sell for \$3/kg?
Let x represent
Let y represent

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Equation 1 :
(represents the total weight of the mixture)

Equation 2:
(represents the value of the mixture)

5
Use desmos to find the POI.
POI is (,).
Concluding statement:

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The Method of Substitution
1. Choose one of the equations and isolate one of its variables by expressing that variable in terms of the other.
2. Substitute the expression that you have determined in place of the corresponding variable in the other equation.
3. Solve the new equation.

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Examples
1. $y = 5x - 2$
 $6x + 3y = 36$
2. $y = 3x - 8$
 $y = 2x - 3$

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3. $x - y = -2$
 $2x - 7y = 11$

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Homework
Pg 26-28 # 1ad, 3, 4ad, 5ad, 7, 9, 14, 20

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