**THE METHOD OF SUBSTITUTION**

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| 1. Choose an equation and **isolate** one variable (\* pick the easiest one!). 2. Substitute one equation into the other (Sub ➊ in ➋). 3. Solve the new equation for the other variable. 4. Substitute that result (x = #) into one of the original equations. 5. Check your solution in both original equations. |

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| **Example 1** Solve the linear system using the method of substitution.  ➊ y = 2x + 4  ➋ 3x + y = 9 |

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| **Example 2** Solve the linear system using the method of substitution.  ➊ 2y – 4x = 2  ➋ Y = - x + 4 |

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| **Example 3** Solve the linear system using the method of substitution.  ➊ 2x + y = 7  ➋ x - y = -1 |

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| **Example 4** Solve the linear system using the method of substitution.  ➊ 2x – y = 4  ➋ 4x + y = 9 |

**PRACTICE**

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| 1. y = 2x + 1   y = -3x – 11 | 1. y = 5x – 2   6x + 3y = 36 |
| 1. 2x + y = 3   -3x + y = -7 | 1. 2x + y = -1   x – 13y = 13 |
| Need to rearrange for x= and substitute x first instead of y.   1. 2x + 5y = -18   x + 2y = -6 | |
| ANSWERS: 1. (-12/5, -19/5), 2. (2, 8), 3. (2, -1), 4. (0, -1), 5. (6, -6) | |