

Algebra I Worksheet #2 Unit 9 page 1

Solve each of the following systems of equations using the **substitution method**. Show your work neatly organized.

1. $3x + y = 10$ $x = \underline{\hspace{2cm}}$
 $y = 2x - 5$ $y = \underline{\hspace{2cm}}$

2. $2x + 3y = 19$ $x = \underline{\hspace{2cm}}$
 $y = x + 3$ $y = \underline{\hspace{2cm}}$

3. $x + 5y = 26$ $x = \underline{\hspace{2cm}}$
 $x = y + 2$ $y = \underline{\hspace{2cm}}$

4. $3x + 2y = 41$ $x = \underline{\hspace{2cm}}$
 $x = 2y + 3$ $y = \underline{\hspace{2cm}}$

5. $x + 5y = 40$ $x = \underline{\hspace{2cm}}$
 $y = 2x - 3$ $y = \underline{\hspace{2cm}}$

6. $y = 2x + 7$ $x = \underline{\hspace{2cm}}$
 $3x + 5y = 9$ $y = \underline{\hspace{2cm}}$

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Solve each of the following systems of equations using the **substitution method**. Show your work neatly organized.

7. $x = 2y - 5$ $x = \underline{\hspace{2cm}}$
 $3x + 5y = 29$ $y = \underline{\hspace{2cm}}$

8. $7x + 2y = 30$ $x = \underline{\hspace{2cm}}$
 $y = 3x + 2$ $y = \underline{\hspace{2cm}}$

9. $2x - 3y = 17$ $x = \underline{\hspace{2cm}}$
 $y = 5x + 3$ $y = \underline{\hspace{2cm}}$

10. $x = -2y + 7$ $x = \underline{\hspace{2cm}}$
 $3x - 5y = -1$ $y = \underline{\hspace{2cm}}$

11. $x = 3y + 1$ $x = \underline{\hspace{2cm}}$
 $x = 5y - 1$ $y = \underline{\hspace{2cm}}$

12. $3x - 2y = 13$ $x = \underline{\hspace{2cm}}$
 $y = 3x - 2$ $y = \underline{\hspace{2cm}}$

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Solve each of the following systems of equations using the **substitution method**. Show your work neatly organized.

13. $2x - y = -4$ $x = \underline{\hspace{2cm}}$
 $y = -3x - 1$ $y = \underline{\hspace{2cm}}$

14. $2x - 3y = 18$ $x = \underline{\hspace{2cm}}$
 $x = y + 7$ $y = \underline{\hspace{2cm}}$

15. $-3x + 5y = 1$ $x = \underline{\hspace{2cm}}$
 $x = 2y - 1$ $y = \underline{\hspace{2cm}}$

16. $y = -3x + 7$ $x = \underline{\hspace{2cm}}$
 $2x - 3y = 12$ $y = \underline{\hspace{2cm}}$

17. $2x + 3y = 11$ $x = \underline{\hspace{2cm}}$
 $y = -6x + 25$ $y = \underline{\hspace{2cm}}$

18. $3x + 2y = -9$ $x = \underline{\hspace{2cm}}$
 $y = -3x + 1$ $y = \underline{\hspace{2cm}}$