

Algebra I
3.5 Worksheet #2
Solving One-Step Equations

NAME: _____
DATE: _____ HOUR: _____

Directions:

Use the Subtraction Property of Equality (subtract the same quantity from both sides) or the Addition Property of Equality (add the same quantity to both sides) to solve for the unknown variable. Show your work. Check your solutions.

$$\begin{array}{l} 1. \ x - 2 = 7 \\ \quad +2 \quad +2 \\ \hline x + 0 = 9 \end{array}$$

$$\boxed{x = 9}$$

$$9 - 2 = 7 \checkmark$$

$$2. \ x - 5 = 4$$

$$3. \ x - 9 = 9$$

$$4. \ y - 7 = 3$$

$$5. \ y - 6 = 5$$

$$6. \ x - 4 = 6$$

$$7. \ y - 7 = 11$$

$$8. \ x - 2 = 14$$

$$9. \ x + 5 = 11$$

$$10. \ x + 6 = 13$$

$$11. \ y + 7 = 12$$

$$12. \ n + 2 = 17$$

$$13. \ n + 8 = 14$$

$$14. \ x + 3 = 22$$

$$15. \ n + 9 = 26$$

$$16. \ x + 12 = 19$$

17. $y - 2 = 17$

18. $x - 12 = 42$

19. $y + 6 = 35$

20. $n + 17 = 31$

21. $x - 6 = 27$

22. $y + 7 = 40$

23. $x - 18 = 12$

24. $y + 9 = 37$

25. $20 = 16 + x$

26. $12 = x - 7$

27. $15 = x - 2$

28. $25 = y + 6$

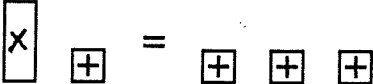
29. $36 = y + 9$

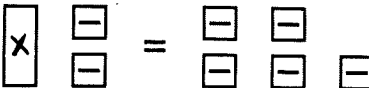
30. $40 = x - 16$

31. $29 = x - 17$

32. $48 = n + 26$

Write the equations modeled by the tiles.

1. 

2. 

Show how to represent and solve each equation using algebra tiles.

3. $x + 3 = 4$

4. $-3 = x + 2$