Solving Equations with Variables on Both Sides

Solve.

1. $8x = 6x - 8$

2. $3y = -2y + 15$

3. $6x = -50 - 4x$

4. $m = 3m - 36$

5. $7n + 2 = 4n + 17$

6. $8y - 3 = 15 + 2y$

7. $5x + 9 = x - 23$

8. $-2k + 19 = 3k - 1$

9. $7 - 6u = 5u + 29$

10. $9m = 4m - 35$

11. $10 - d = -34 - 5d$

12. $8v + 1 = 7v - 20$

13. $11p + 16 = 2p + 7$

14. $12y + 60 = 13y + 2$

15. $6x + 7 = 8x - 13$

16. $4x - 9 = 7x + 12$

Write an equation and solve.

17. Eighty, decreased by three times a number, is the same as five times the number, increased by eight. Find the number.

18. Nine more than four times a number is the same as one less than twice the number. Find the number.

19. Twice a number increased by 12 is equal to 13 less than three times the number. Find the number.

20. Eight minus two times a number is equal to the number plus 17. Find the number.