Solving Equations with Variables on Both Sides

$$4x - 6 = x + 9$$
$$4x - x - 6 = x - x + 9$$
$$3x - 6 = 9$$
$$3x - 6 + 6 = 9 + 6$$
$$\frac{3x}{3} = \frac{15}{3}$$
$$x = 5$$

1. $4x - 6 = x + 9$

2. $4 - 7x = 1 - 6x$

3. $^-4x - 3 = ^-6x + 9$

4. $41 - 2n = 2 + n$

5. $6(2 + y) = 3(3 - y)$

6. $4y = 2(y - 5) - 2$

7. $6x - 9x - 4 = ^-2x - 2$

8. $-(x + 7) = ^-6x + 8$

9. $3 - 6a = 9 - 5a$

10. $^-9x + 6 = ^-x + 4$

11. $5x - 7 = ^-10x + 8$

12. $y + 3 = 4y - 18$

13. $^-3(y + 3) = 2y + 3$

14. $2(^-3a + 5) = ^-4(a + 4)$

15. $7x - 3 = 2(x + 6)$

16. $^-6x + 9 = 4(5 - x)$

17. $3(x + 2) = ^-5 - 2(x - 3)$

18. $2(x - 3) = (x - 1) + 7$

19. $\frac{1}{3}(6y - 9) = ^-2y + 13$

20. $\frac{1}{6}(12 - 6x) = 5(x + 4)$