

Name: _____

Date: _____

Parentheses and variables on both sides

Distribute first, then collect like terms.

1. $3(n + 4) = n + 28$ _____

11. $4(x - 5) = 3x - 14$ _____

2. $2(a + 5) = a + 13$ _____

12. $2(x - 6) = x - 8$ _____

3. $2(y - 4) = y - 9$ _____

13. $3(y + 2) = 2y + 3$ _____

4. $5(n + 4) = n + 44$ _____

14. $4(y + 5) = y + 17$ _____

5. $5(x - 1) = 4x - 3$ _____

15. $3(a + 6) = 2a + 9$ _____

6. $4(a + 3) = a + 21$ _____

16. $5(x - 3) = 4x - 16$ _____

7. $5(a - 1) = 4a - 1$ _____

17. $4(y + 3) = y - 6$ _____

8. $3(y + 6) = 2y + 24$ _____

18. $2(n - 5) = n - 17$ _____

9. $2(n - 5) = n - 16$ _____

19. $5(n - 4) = 3n - 26$ _____

10. $5(a - 2) = 3a - 28$ _____

20. $5(n - 4) = 3n - 32$ _____

Multi-Step Equations: Answer Key

1. $n = 8$

2. $a = 3$

3. $y = -1$

4. $n = 6$

5. $x = 2$

6. $a = 3$

7. $a = 4$

8. $y = 6$

9. $n = -6$

10. $a = -9$

11. $x = 6$

12. $x = 4$

13. $y = -3$

14. $y = -1$

15. $a = -9$

16. $x = -1$

17. $y = -6$

18. $n = -7$

19. $n = -3$

20. $n = -6$