

Solving Equations with Brackets

KEY

Type IV

Solve the following.

1. $3(x + 2) = 12$ $x = 2$
2. $4(x + 5) = 300$ $x = 70$
3. $4(x - 3) = 20$ $x = 8$
4. $3(x + 5) = 2(x + 9)$ $x = 3$
5. $4(x + 3) = 2(x + 8)$ $x = 2$
6. $7(x - 3) = 3(2x + 6)$ $x = 39$
7. $6(5x - 3) = 2(2x + 4)$ $x = 1$
8. $4(2x - 3) = 28$ $x = 5$
9. $6(x - 5) = 30$ $x = 10$
10. $4x - 2 = 3(x + 1)$ $x = 5$

B. Solve the following.

1. $4(x + 1) = 12$ $x = 2$
2. $5(x + 2) = 30$ $x = 4$
3. $7(x - 2) = 21$ $x = 5$
4. $5(x - 3) = 4(x + 6)$ $x = 39$
5. $3(x + 7) + 2(x - 5) = 36$ $x = 5$
6. $4(x + 5) + 2(x - 3) = 20$ $x = 16$
7. $4(x + 5) = 3(x + 12)$ $x = 1$
8. $2(x - 9) = x + 10$ $x = 28$
9. $3 - \frac{1}{2}(4 - x) = 2 + \frac{1}{4}(5 + x)$ $x = 9$
10. $9(x - 2) = 6(x + 2)$ $x = 10$
11. $4(x + 5) + 2(x - 6) = 62$ $x = 4$
12. $3(x + 2) = x + 8$ $x = 1$
13. $7(2x + 5) = 3(4x + 19)$ $x = 11$

11. $3(x + 5) = 2(x + 10)$ $x = 5$
12. $3 - (6x - 7) = 4x - 2$ $x = -6$
13. $3(x - 5) = 2(x + 6)$ $x = 27$
14. $7(x - 3) = 5(x + 5)$ $x = 23$
15. $3(x - 5) = 2(x + 3)$ $x = 15$
16. $2(x + 4) + 5(x + 3) = 100$ $x = 1$
17. $3(x + 5) + 2(x - 4) = 27$ $x = 4$
18. $4(2x + 2) = 5(x + 7)$ $x = 9$
19. $8(x + 2) = 6(x + 3)$ $x = 1$
20. $5(3x - 2) = 4(x + 14)$ $x = 6$

14. $\frac{1}{2}(x + 1) = \frac{1}{3}(x - 1)$ $x = -5$
15. $3(x - 6) = 12$ $x = 10$
16. $3(5x - 2) = 9$ $x = 1$
17. $2(x + 6) = x + 12$ $x = 0$
18. $7(6x + 2) = 7(3x + 5)$ $x = 1$
19. $5(x - 6) = 2(x + 3)$ $x = 12$
20. $7(x + 3) = 3(x + 7)$ $x = 0$
21. $6(x + 3) + 5(x + 3) = 88$ $x = 5$
22. $2(x + 5) + 3(x + 6) = 53$ $x = 5$
23. $2(x + 2) = (x + 5)$ $x = 1$
24. $5(3x + 6) + 2(x + 3) = 70$ $x = 2$
25. $x + 5 + 2(x + 3) = 20$ $x = 3$
26. $10(x + 2) = 9(x + 6)$ $x = 34$