



PROBLEMS AND SOLUTION - LINEAR EQUATIONS IN ONE VARIABLE
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PLEASE NOTE THAT YOU CANNOT USE A CALCULATOR ON THE ACCUPLACER - ELEMENTARY ALGEBRA TEST! YOU MUST BE ABLE TO DO THE FOLLOWING PROBLEMS WITHOUT A CALCULATOR!

Problem 1:

Solve the equation $y + 5 = 11$.

Problem 2:

Solve the equation $y - 5 = 11$.

Problem 3:

Solve the equation $-9 + R = 3$.

Problem 4:

Solve the equation $3 = \frac{3}{2}x$.

Problem 5:

Solve the equation $-18 = 2x$.

Problem 6:

Solve the equation $\frac{x}{3} = -9$.

Problem 7:

Solve the equation $\frac{3x}{4} = 18$.

Problem 8:

Solve the equation $\frac{t + 9}{4} = -1$.

Problem 9:

Solve the equation $-x = 10$.

Problem 10:

Solve the equation $-1.82 = -2.4x + 16.18$.

Problem 11:

Solve $8x + 12 = 28$.

Problem 12:

Solve $2a - 5 = 10 - 3a$.

Problem 13:

Solve $2x - 3 = 9 - 10x$.

Problem 14:

Solve $9 - 4x = 8x$.

Problem 15:

Solve $7 - 3x = 11$.

Problem 16:

Solve $3x + 2(4 - 9x) - 3(x - 3) + x = 0$.

Problem 17:

Solve $7 - (x - 8) = 4x$.

Problem 18:

Solve $\frac{3}{4} - x = \frac{7}{8}$.

Problem 19:

Solve $5x - 15 = 5(x - 3)$.

Problem 20:

Solve $2x + 3(x + 1) = 5x + 4$.

Problem 21:

Solve $x + \frac{1}{7}x = 16$.


SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. $y = 6$	2. $y = 16$	3. $R = 12$
4. $x = 2$	5. $x = -9$	6. $x = -27$
7. $x = 24$	8. $t = -13$	9. $x = -10$
10. $x = 7.5$	11. $x = 2$	12. $a = 3$
13. $x = 1$	14. $x = \frac{3}{4}$	15. $x = -\frac{4}{3}$
16. $x = 1$	17. $x = 3$	18. $x = -\frac{1}{8}$
19. Infinitely many solutions	20. No solutions	21. $x = 14$