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 ***-18 = -2.4x***.

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