The Weekly Rigor

10 Problems in Solving First-Degree Equations

PROBLEMS

Solve each equation.

1. $3x - 4 = 12 - x$.

2. $4x + 6 = 2x + 10$.

3. $5x + 4 - 2x = 10 + x$.

4. $18 - 3x = 5x + 2$.

5. $7x + 6 = 5x + 14$.

6. $4x + 2 = 22$.

7. $-6(x - 4) - 10 = -12.$

8. $7m + 5 = 7m - 3.$

9. $6n + 4 = 9n + 4 - 3n.$

10. $2(x + 3) + 6(x - 4) = 5(x - 9).$

ANSWERS

1. 4	2. 2
3. 3	4. 2
5. 4	6. 5
7. $\frac{13}{3}$	8. Ø (the empty set, i.e., no solution)
9. $\mathbb{R}$ (math talk for "all real numbers")	10. -9

"Only he who never plays, never loses."