

Solving Equations Pre-Test

Name _____ Per _____

This is a quick check to see how many of these you can already do and how much of the process you understand.

Solve each equation: Write your reasoning next to each step.

Ex: $2x + 3 = 21$

$2x = 18$ -----Subtraction Property of Equality (POE for short)

$x = 9$ -----Division Property of Equality (POE for short)

1. $y - 7 = 2$

2. $x + 12 = 19$

3. $-5 + z = 8$

4. $9x = 72$

5. $\frac{m}{-8} = -2.5$

6. $\frac{7}{8}a = 42$

7. $15 = 3 - 4x$

8. $2x + 7 + 29 = 90$

9. $8 - (b - 2) = 11$

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

11. $3(q - 2) + 2 = 8q - 7 - 2q$

12. $5z = -3(z + 7)$

Solve for the indicated variable.

13. $r - 2s = 14$, for s

14. $V = \frac{1}{3}bh$, for b

15. $P = 2(\ell + w)$, for ℓ