GRADE 8 MATH · HOMEWORK · ADVANCED

Solve an Equation with Infinitely Many Solutions

SCORE / 25

01 Part A · Practice

If solving gives a true statement with no variable (like 6 = 6), every value works: the equation has infinitely many solutions.

1 ●○○
Simplify each side of $-2(a + 9) + 6(a - 5) = 8a - 48 - 4a$. Compare the sides. How many solutions?

2 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$-52 + 28n = 7(5n - 8) - 7n + 6$

3 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$5(-5r + 17) = -11 - 8(2r - 12) - 9r$

4 ●○○
Simplify each side of $11h - 6 - 4h = 4(3h + 3) - 5h - 18$. Compare the sides. How many solutions?

5 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$-24g - 28 = 12 - 4(5g + 10) - 4g$

6 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$-3 + 3(5z + 10) - z = 14z + 27$

7 ●○○
Simplify each side of $-11d - 17 = -1 - 4(5d + 4) + 9d$. Compare the sides. How many solutions?

8 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$-8(2h + 6) + 9h + 7 = -41 - 7h$

9 ●○○
Solve. Tell whether there is one solution, no solution, or infinitely many solutions.
$17 - 8(3s + 2) + 3s = -16s + 96$

10 ●○○
Simplify each side of $-3 + 3(2x - 4) + 5x = 8x - 15 + 3x$. Compare the sides. How many solutions?

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Preview - the full worksheet and its answer key are at primeworksheet.com