Answer key

The method: Variables on both sides

Move the x terms to one side and the numbers to the other.

$-8x - 2 = x - 47$

$-9x - 2 = -47$ subtract x on both sides

$-9x = -45$ add 2 to both sides

$x = 5$ divide both sides by −9

Problems 1 and 2 worked out · Version 0A

$-9x + 10 = 4x - 29$

$-13x + 10 = -29$ subtract 4x on both sides

$-13x = -39$ subtract 10 from both sides

$x = 3$ divide both sides by −13

$-2x + 2 = 9x + 2$

$-11x + 2 = 2$ subtract 9x on both sides

$-11x = 0$ subtract 2 from both sides

$x = 0$ divide both sides by −11

Variables on both sides · Version 0A

1) x = 3 2) x = 0 3) x = 7 4) x = 4 5) x = −4
6) x = 3 7) x = 7 8) x = 5 9) x = −3 10) x = −9
11) x = −8 12) x = −2 13) x = −6 14) x = −9