

Name: .....

## Solving Linear Equations Worksheet: Variable on Both Sides

Solve each equation

①  $-8n + 4(1 + 5n) = -6n - 14$

②  $-3(x - 1) + 8(x - 3) = 6x + 7 - 5x$

③  $-14 + 6b + 7 - 2b = 1 + 5b$

④  $4(-8x + 5) = -32x - 26$

⑤  $-(x + 7) = -6x + 8$

⑥  $2(x - 4) = \frac{1}{2}(2x - 8)$

⑦  $40 - x = 4(-3 - 6x) + 6$

⑧  $-3 - (a - 2) = 7a + 15$

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## Solving Linear Equations Worksheet: Variable on Both Sides

### Answers

①  $-8n + 4(1 + 5n) = -6n - 14$

$n = -1$

②  $-3(x - 1) + 8(x - 3) = 6x + 7 - 5x$

$x = 7$

③  $-14 + 6b + 7 - 2b = 1 + 5b$

$b = -8$

④  $4(-8x + 5) = -32x - 26$

No Solution

⑤  $-(x + 7) = -6x + 8$

$x = 3$

⑥  $2(x - 4) = \frac{1}{2}(2x - 8)$

$x = 4$

⑦  $40 - x = 4(-3 - 6x) + 6$

$x = -2$

⑧  $-3 - (a - 2) = 7a + 15$

$a = -2$