

Worksheet

05/15/2020

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Problem quickname: 9505

1)

Solve the equation: Determine the value of the variable x. Combine like terms and perform equivalent transformations.

- a) $2 + 1 - 1 = -9x + 56$ b) $7x - 135 + 4 = 6 - 4$
c) $45 - 3 - x = 8x - 3$ d) $-250 - 4 - 3x = 4 - 6x$
e) $11x - 430 + 5 = -1 + 3x$ f) $106 + 3x - 2 = -4 + 9x$
g) $5x - 210 + x = -2x + 5x$ h) $-10x + 613 - 1 = 5x - 6x$
i) $6x - 635 + 5 = -x - 2x$

2)

Solve the equation: Determine the value of the variable.

- a) $145 + 8 - 1 = 4 + 4i - 4$ b) $-2n + 46 - 5 = 2 + 3 - 2$
c) $1 - 5 + 2 = 683 - 7q - 6$ d) $-4n + 134 + 5 = 2 + 4n - 7$
e) $10g + 2 + 3 = 3g + 1 + 179$ f) $-7c - 4c + 5c = -415 + 4c + 5$
g) $-5b - 1 - 2b = -515 - 5 + 1$ h) $-7j - 7j + 4j = -4j - 3 - 543$
i) $13g - 2g - 4g = -5g + 756 + 3g$

3)

Solve the equation: Determine the value of the variable x.

a) $-353 + 5 = -5x - 3$ | rearrange and combine like terms
 $\square = -\square x - \square$ | + \square
 $\square = -\square x + \square$ | + \square
 $\square x = \square$ | : \square
 $x = \square$

b) $405 + 3x = 14x - 2x$ | rearrange and combine like terms
 $\square x + \square = \square x$ | - \square
 $\square x = \square x - \square$ | - \square
 $\square x = -\square$ | : \square
 $x = \square$

c) $21 + 4x = 2x + 5x$ | rearrange and combine like terms
 $\square x + \square = \square x$ | - \square
 $\square x = \square x - \square$ | - \square
 $\square x = -\square$ | : \square
 $x = \square$

$$\begin{array}{l|l}
 \text{d) } 10x + 5 = 170 + 5 & \text{rearrange and combine like terms} \\
 \square x + \square = \square & | - \square \\
 \square x = \square & | : \square \\
 x = \square &
 \end{array}$$

$$\begin{array}{l|l}
 \text{e) } -67 + 4 = -x - 8x & \text{rearrange and combine like terms} \\
 \square = -\square x & | + \square \\
 \square = -\square x + \square & | + \square \\
 \square x = \square & | : \square \\
 x = \square &
 \end{array}$$

4)

Solve the equation: Determine the value of the variable. Combine like terms and perform equivalent transformations.

a) $11u - u = 2u + 88$

b) $5j - 2j = -4j + 119$

c) $2d - 4 = -316 + 8d$

Good Luck!