

Solve each equation and **check** your answer.

1. x + x + 2 = 2x + 1 + x ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

2. 6x – x + 3 = x + 11 ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x again.

3. 3x + x + 4 = 4x – 2x + 12 ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

4. 3x + 6 - 2 = 7x ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

5. x + 5 = 5x - 2x + 1 ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

6. 7x – 2x - x + 4 = 2x + 16 ⎕Distribute, if needed

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

7. – 2( -4x + 4) = 88 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

8. – 2( - 6x - 7) = 158 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

9. – 4( 6 + 3x) = 12 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

10. 7( - 9- 6x) = -315 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

11. – 6( 2x - 8) = 48 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

13. 7( - 3x + 1) = -161 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

14. – 2( 5x + 2) = 26 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

15. 4x – x + 16 = 5(x + 0) ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.

16. 3(2x + 6) = x + 20 + 31 ⎕Distribute, if needed - **WATCH THE NEGATIVES**

⎕Combine like terms on the same side of the variable (do

not cross the = sign)

⎕Move the variables to one side by doing the inverse

Operation (move the lower variable)

⎕Move the constant to the other side of the equation by

doing the inverse operation

⎕Divide by the coefficient

Check your answer ⎕Write the original problem and replace x with the

answer

⎕ Follow order of operations and evaluate each side

⎕ Is the left side of the equation equal to the right side?

if so, your answer is correct, if not, solve for x.