

DRAW For Algebra

To help me solve one-variable algebra equations.

Discover the variable and the operations.

- Scan the equation and look for operation signs (+, -, ×, ÷)
- Circle the operation signs.

Read the equation and combine like terms.

- Read the whole equation out loud.
- Look for “like terms.”
 - For example, numbers that have the same letter next to them: $6a + 2a + 5 + 2 = 15$. Both “ $6a$ ” and “ $2a$ ” are like terms. Also, numbers without letters next to them are like terms (“ 5 ” & “ 2 ”).
- Combine like terms.
 - For example, “ $6a$ ” and “ $2a$ ” can be combined ($6a + 2a = “8a”$). Also, “ 5 ” and “ 2 ” can be combined ($5 + 2 = “7”$).
 - $6a + 2a + 5 + 2 = 15$ now becomes $8a + 7 = 15$

Answer the equation, or draw and check.

- If you know the answer or if you can solve the equation without drawing, then write the answer.
 - For example: $8a + 7 = 15$
 $8a = 15 - 7$
 $8a = 8$
 $a = 1$
- If you don’t know the answer or how to solve the equation without drawing, then draw the answer.

○ For example: $8a + 7 = 15$
 $8a = 15 - 7$
 $8a = 8$
 $a = 1$



Write the answer for the variable and check the equation

- Write the number that represents the answer

- For example: $a = 1$
- Substitute your answer for the letter in the original equation.
 - For example:

$$6a + 2a + 5 + 2 = 15$$

$$6(\mathbf{1}) + 2(\mathbf{1}) + 5 + 2 = 15$$

- Work the problem and see if the left side equals the right side.
 - For example:

$$6(1) + 2(1) + 5 + 2 = 15$$

$$(6 \times 1) + (2 \times 1) + 5 + 2 = 15$$

$$6 + 2 + 5 + 2 = 15$$

$$15 = 15$$