## **DRAW** For Algebra

To help me solve one-variable algebra equations.

**D**iscover the variable and the operations.

- Scan the equation and look for operation signs  $(+, -, \times, \div)$
- Circle the operation signs.

**R**ead the equation and combine like terms.

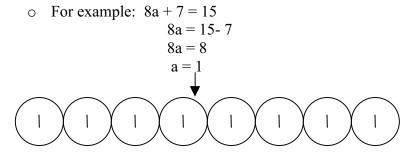
- Read the whole equation out loud.
- Look for "like terms."
  - O For example, numbers that have the same letter next to them: 6a + 2a + 5 + 2 = 15. Both "6a" and "2a" are like terms. Also, numbers without letters next to them are like terms ("5" & "2").
- Combine like terms.
  - o For example, "6a"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

o 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.



Write the answer for the variable and check the equation

• Write the number that represents the answer

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

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

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

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