## 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 $(+,-, \times, \div)$
- Circle the operation signs.
$\mathbf{R e a d ~ t h e ~ e q u a t i o n ~ a n d ~ c o m b i n e ~ l i k e ~ t e r m s . ~}_{\text {en }}$
- Read the whole equation out loud.
- Look for "like terms."
- For example, numbers that have the same letter next to them: $6 a+2 a+5+2=$ 15. Both " 6 a " and " 2 a " are like terms. Also, numbers without letters next to them are like terms (" 5 " \& " 2 ").
- Combine like terms.
- For example, " 6 a " and " 2 a " can be combined $(6 a+2 a=$ " 8 a "). Also, " 5 " and " 2 " can be combined ( $5+2=$ " 7 ").
- $6 \mathrm{a}+2 \mathrm{a}+5+2=15$ now becomes $\mathbf{8 a}+7=15$

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: $8 a+7=15$

$$
\begin{aligned}
8 \mathrm{a} & =15-7 \\
8 \mathrm{a} & =8 \\
\mathrm{a} & =1
\end{aligned}
$$

- If you don't know the answer or how to solve the equation without drawing, then draw the answer.

$\mathbf{W}$ rite the answer for the variable and check the equation
- Write the number that represents the answer
- For example: $\mathrm{a}=1$
- Substitute your answer for the letter in the original equation.
- For example:

$$
\begin{aligned}
& 6 a+2 a+5+2=15 \\
& 6(\mathbf{1})+2(\mathbf{1})+5+2=15
\end{aligned}
$$

- Work the problem and see if the left side equals the right side.
- For example:
$6(1)+2(1)+5+2=15$
$(6 \times 1)+(2 \times 1)+5+2=15$
$6+2+5+2=15$
$15=15$

