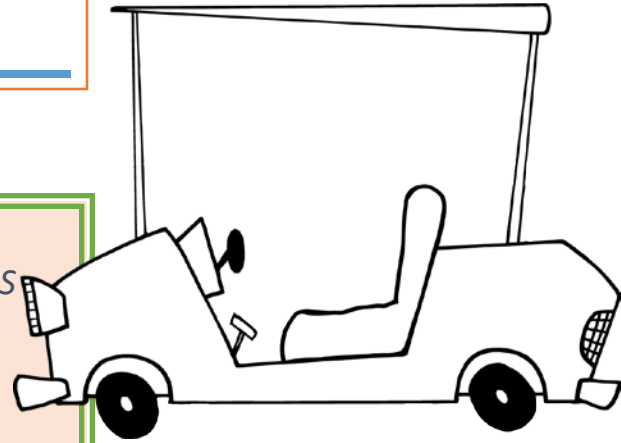


Complicated Expressions

A **COMPLICATED EXPRESSION** IS ONE WHICH CONTAINS MULTIPLE TERMS OF THE SAME VARIABLE, OR THE EXPONENTS OF ONE OR MORE TERMS, OR MULTIPLE OPERATIONS.



Simplifying complicated expressions

EXAMPLES:

$6A-8+2A-3A$ CAN BE WRITTEN AS

$$5A-8$$

$6-(X-2)^2$ CAN BE WRITTEN AS

$$6-(X-2)(X-2)$$

$$= 6-(X^2-2X-2X+4) = 6-(X^2-4X+4) = -X^2+4X+2$$

Placing Parentheses in proper position based on the given description

EXAMPLES:

PLACING PARENTHESES IN " $23-12+8$ " ACCORDING TO "TWENTY THREE MINUS THE SUM OF TWELVE AND EIGHT" WILL GIVE " $23-(12+8)$ "

PLACING PARENTHESES IN " $30\div 5\times 3$ " ACCORDING TO "THE DIVISION OF THIRTY BY THE PRODUCT OF FIVE AND THREE" WILL GIVE " $30\div(5\times 3)$ "

Writing complicated expressions in specified format

EXAMPLES:

$(U-2)^2+5U-2$ CAN BE WRITTEN AS "...+U+..."

$$(U-2)^2+5U-2 = (U-2)(U-2)+5U-2 = U^2-4U+4+5U-2 = U^2+U+2$$

$R-(A+1)^2-3$ CAN BE WRITTEN AS "R - ... - ... - 2"

$$R-(A+1)^2-3 = R-(A+1)(A+1)-3 = R-(A^2+A+A+1)-3 = R-A^2-2A-2$$

Meets: Common Core Standard High School – HAS-SSE.A.1b