

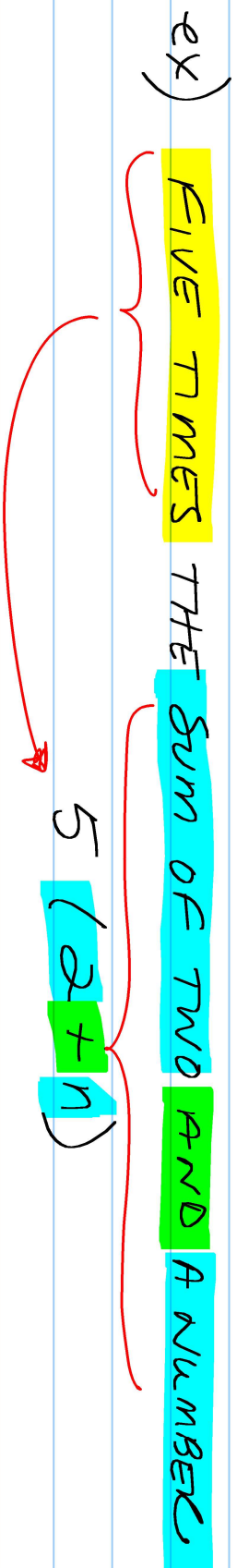
### 3.1 TRANSLATING WORDS & ALGEBRAIC EXPRESSIONS.

p. 64 (red) / p. 70 (blue)

CHANGING WRITTEN STATEMENT TO ALGEBRAIC EXPRESSION:

1) CHOOSE A VARIABLE FOR THE UNKNOWN VALUE.  
 WHAT ARE YOU LOOKING TO SOLVE?

2) ANY BRACKETS NEEDED? \*\* CAN BE CHANGING



$$5(2) + 1 \quad \underline{\text{WORDS}}$$

3) ARE THERE ANY EXPONENTS ASSOCIATED WITH THE VARIABLE?

ex) A NUMBER SQUARED PLUS SIX

$$x^2 + 6$$

4) ANY  $x/\div$  ASSOCIATED WITH THE VARIABLE?

ex) DOUBLE A NUMBER  $\Rightarrow$   $2x$

ex) A VALUE SHARED BETWEEN }  $\Rightarrow$   $\frac{x}{3}$   
THREE PEOPLE

OR  $(x \div 3)$

5) DECIDE IF SOMETHING IS BEING +/-  
TO/FROM YOUR VARIABLE TERM

ex) TWO LESS THAN THREE TIMES A NUMBER.

$$2 - 3n \times \text{WEONS } \uparrow$$

$$3n - 2$$

\*\* BE CAREFUL TRANSLATING  $\div$  &  $\uparrow$  -  
BECAUSE THE ORDER MATTERS!

6) IF THE EXPRESSION IS EQUAL TO A VALUE,  
MAKE AN EQUATION.  $\rightarrow$  NO "="  $\rightarrow$  HAS AN "="

ex) TWICE THE SUM OF A NUMBER AND THREE IS FOUR.  
INDICATES AN EQUATION

$$2(n + 3) = 4$$

CHANGING ALG. EXPRESSION TO WRITTEN STATEMENT:

ex)  $7x - 2$  SEVEN TIMES A NUMBER MINUS TWO.  
TWO LESS THAN SEVEN TIMES A NUMBER.

ex)  $6(x + 8)$  SIX TIMES THE SUM OF A NUMBER PLUS EIGHT

ex)  $\frac{1}{5}x - 1$  ONE FIFTH OF A NUMBER MINUS ONE

ONE DIVIDED BY FIVE TIMES A NUMBER MINUS ONE

A FIFTH OF A NUMBER MINUS ONE.

You try:

1) A THIRD OF A NUMBER PLUS FIVE.

2) A NUMBER HALVED & ADDED TO NEGATIVE TEN,

3) FOUR LESS THAN TWICE A NUMBER IS ONE.

4) TRIPLE THE SUM OF A NUMBER & ONE IS TWO.

