#### This book has permission to use the "N&K method of COLORS".

4) Question: If (6 + 14x), is 25 more than 9, find the value of 5x.

- A) 0 changed
- *B)* 5
- *C)* 10
- D) 15

For speed, while solving something similar, only THINK the words in blue; WRITE only the words in other COLORS.

## Solution:

Given 1) "6 + 14x", is 25 more than 9..

*2) Find the value of* "5x".

# Road Map of Solution:

First: Convert the "Word Equation" (given 1st statement) into a "Mathematical Equation". Second:Solve the Mathematical Equation to find the value of "x". Third: Use the value of "x"to find the value of "5x".

## **F**irst

Word	Equation:	"6 + 14x",	is	25 more	e than 9	
Mathematical	Equation:	6 + 14x	=	25 +	9	 equation # 1
	$\Rightarrow$	6 + 14x	=	34		

# <mark>S</mark>econd,

We need to rewrite the equation above, such that we end up with ONLY the variable and its coefficient on the LHS. For that, we need to get rid of constant, "6" from the LHS. That can be done by subtracting a from both sides of the eq.

$$\Rightarrow 6+14x-6 = 34-6$$
  

$$\Rightarrow 6+14x-6 = 34-6$$
  

$$\Rightarrow 14x = 28$$

 $\Rightarrow$  14x = 28 ..... equation # 1b We need to rewrite the equation above, such that we end up with ONLY the variable, ..... on the LHS. For that, we need to get rid of coefficient, "14" from the LHS. That can be done by multiplying  $\frac{1}{11}$  to both sides of the eq.

$\Rightarrow \qquad 14x \times \left(\frac{1}{44}\right) = 28 \times \left(\frac{1}{14}\right)$ $\Rightarrow \qquad 1x \times \left(\frac{1}{44}\right) = -2 \times \left(\frac{1}{44}\right)$	⇒	$14x \times \begin{pmatrix} 1 \\ 14 \end{pmatrix} = 28 \times \begin{pmatrix} 1 \\ 14 \end{pmatrix}$	
$\rightarrow$ 1v× $\begin{pmatrix} 1 \\ - 2 \times \begin{pmatrix} 1 \\ - \end{pmatrix}$	⇒	$44x \times \left(\frac{1}{44}\right) = 28 \times \left(\frac{1}{14}\right)$	
$\rightarrow$ $1 \land ( \frac{1}{1} ) = 2 \land ( \frac{1}{1} )$	⇒	$1 \times \left( \frac{1}{1} \right) = 2 \times \left( \frac{1}{1} \right)$	
$\Rightarrow \qquad 1x \times (1) = 2 \times (1)$	⇒	$1x \times (1) = 2 \times (1)$	
$\therefore$ $\Rightarrow$ $x = 2$ $\dots$ equation #1c	⇒	x = 2	 equation # 1c

<u><i>Third,</i></u>	Value of "5x"	=	5 × <b>x</b>	
Substituting the value of "x"	from eq#1c into the	equ	ation above, we get,	
	Value of "5x"	=	5 × 2	
	Value of "5x"	=	10	 Answer (C)