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

10) Question: The equation below represents a line on the xy coordinate plane.

$2y = 10x + 6$

For which value of "x" would "y" be equal to "29"?

A) $\frac{5}{26}$

B) $\frac{5}{16}$

C) $\frac{16}{5}$

D) $\frac{26}{5}$

nc

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

Given: 1) The equation of a line on the xy-coordinate plane. $2y = 10x + 6$

Solve: For which value of "x" would "y" be equal to "29"?

Road Map of Solution:

First Step: Start with the original equation.

Second Step: Rewrite the above equation, such that we have only "x" on one side of the equation.

Third Step: Substitute "y = 29" in that equation and solve tofind the value of "x".

First Step: Start with the original equation

$2y = 10x + 6$

Second Step: Rewrite the above equation such that we end up with only "x" one side of the equation.

$[\ 2y\ ] - 6 = [\ 10x + 6\ ] - 6$

$2y - 6 = 10x + 6 - 6$

$2y - 6 = 10x$

$[\ 2y - 6] \times \left(\frac{1}{10}\right) = [\ 10x] \times \left(\frac{1}{10}\right)$

$[\ 2y - 6] \times \left(\frac{1}{10}\right) = [\ 10x] \times \left(\frac{1}{10}\right)$

$\frac{[\ 2y - 6] \times (\ 1)}{10} = [\ 1x] \times \left(\frac{1}{1}\right)$

$\frac{[\ 2y - 6]}{10} = [\ 1x] \times (\ 1)$

$\frac{[\ 2y - 6]}{10} = x$

$\frac{[\ 2(y) - 6]}{10} = x$

Third Step: Substitute "y = 29" in that equation and solve tofind the value of "x".

$\frac{[\ 2(29) - 6]}{10} = x$

$\frac{[\ 58 - 6]}{10} = x$

$\frac{[\ 52\ ]}{10} = x$

$\frac{52}{10} = x$

$\frac{26}{5} = x$ ..... *Answer(D)*