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

7) Question: If $x = \left(\frac{1+(c+1)^p}{1+(c+1)^{p+1}}\right)y$

What is the value of "y"?.nw,nc.

A)
$$y = \left(\frac{1+(c+1)^p}{1+(c+1)^{p+1}}\right) x$$

B)
$$y = \left(\frac{1+(c+1)^{p+1}}{1+(c+1)^p}\right) x$$

C)
$$y = \left(\frac{1}{1+(c+1)^p}\right)x$$

D)
$$y = \left(\frac{1}{1+(c+1)^{p+1}}\right) x$$

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

Given: 1) *The equation.* Solve: Which is the value of "y"?

Road Map of Solution: First Step: Rewrite the equation with only y on one side of the equation.

Rewriting the original equation:

$$\begin{aligned} x &= \left(\frac{1+(c+1)^{p}}{1+(c+1)^{p+1}}\right)y \\ x &= \left(\frac{[1+(c+1)^{p}]}{[1+(c+1)^{p+1}]}\right)y \\ \{x\}x \left\{ x \right\} x \left\{ \frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]} \right\} &= \left\{ \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p+1}]}\right)y \right\}x \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]}\right) \\ \{x\}x \left\{ \frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]} \right\} &= \left\{ \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p+1}]}\right)y \right\}x \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]}\right) \\ \{x\}x \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]}\right) &= \left\{ \left(\frac{1}{1}\right)y \right\}x \left(\frac{1}{1}\right) \\ \{x\}x \left(\frac{[1+(c+1)^{p+1}]}{[1+(c+1)^{p}]}\right) &= \left\{ (1)y \right\}x (1) \end{aligned}$$