

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

2) Question: If "p = cq" , where "c" is a constant.
If "p = 36" when "q = 12", what is the value of "p", when "q = 10".

- A) 10 changed
 - B) 20
 - C) 30
 - D) 40
- nc

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

Solution:

- Given
- 1) p = cq
 - 2) p = 36 when "q = 12"
 - 3) What is the value of "p", when "q = 10". Find/Solve

Road Map of Solution:

First: Substitute the know values of "p" and "q" (given 2nd statement) in the given equation (given 1st statement) to find the value of the constant "c".

Second: Now that you know the value of constant "c", substitute "c" and "q" (from given 3rd statement) in the given equation (given 1st statement) to find the value of "p".

$$\begin{aligned}
 p &= cq && \dots\dots\dots \text{equation \# 1} \\
 p &= c \times q \\
 36 &= c \times 12 \\
 \{ 36 \} \times \left(\frac{1}{12} \right) &= \{ c \times 12 \} \times \left(\frac{1}{12} \right) \\
 \{ 36 \} \times \left(\frac{1}{12} \right) &= \{ c \times \cancel{12} \} \times \left(\frac{1}{\cancel{12}} \right) \\
 \{ 3 \} \times \left(\frac{1}{1} \right) &= \{ c \times 1 \} \times \left(\frac{1}{1} \right) \\
 \{ 3 \} \times (1) &= \{ c \times 1 \} \times (1) \\
 3 &= c && \dots\dots\dots \text{equation \# 1b}
 \end{aligned}$$

$$\begin{aligned}
 p &= cq && \dots\dots\dots \text{equation \# 1} \\
 p &= 3 \times q \\
 p &= 3 \times 10
 \end{aligned}$$

$p = 30 \dots\dots\dots \text{Answer (C)}$
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