

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

26) Question: Sweaters made of natural wool cost 20% more than the ones made out synthetic materials. Based on that observation, if a wool sweater costs \$204, how much should a similar sized synthetic materials sweater cost?

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

Solution:

- Given
- 1) Sweaters made of natural wool cost 20% more than the ones made out synthetic materials.
 - 2) A wool sweater costs \$204.
 - 3) How much should a similar sized synthetic materials sweater cost?

Road Map of Solution:

First Step: Convert the "Word Equation" in First Given Statement into a "Math Equation".

Second Step: Switch the cost of the wool sweater (\$204), in the "Math Equation" above and solve the equation.

First Step: Convert the "Word Equation" in First Given Statement into a "Math Equation".

Word Eq. \Rightarrow Sweaters made of natural wool cost 20% more than the ones made out synthetic materials.

Math Eq. \Rightarrow Cost of natural wool Sweaters are 20% more than Cost of synthetic material sweaters.

$$\Rightarrow \text{Cost of natural wool Sweaters} = (20\% + 100\%) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$204 = (120\%) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$204 = (120\%) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$204 = (120 \times \frac{1}{100}) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$204 = (1.20) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \{ \$204 \} \times \frac{1}{1.20} = \frac{1}{1.20} \times \{ (1.20) \text{ Cost of synthetic material sweaters} \}$$

$$\Rightarrow \$170 = \frac{1}{1.20} \times (1.20) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$170 = \frac{1}{\cancel{1.20}} \times (\cancel{1.20}) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$170 = 1 \times (\cancel{1.20}) \text{ Cost of synthetic material sweaters}$$

$$\Rightarrow \$170 = \text{Cost of synthetic material sweaters}$$

Answer