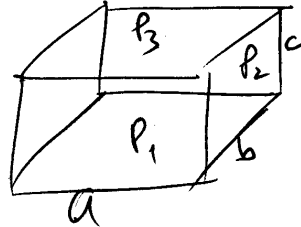


439. Površine strana kvadra odnose se kao 3:6:10. Ako je oplošje kvadra 190 cm^2 , koliki mu je volumen?

1. 180 cm^3 2. 160 cm^3 3. 150 cm^3 4. ne postoji takav kvadar



$$O = 190 \text{ cm}^2$$

$$P_1 : P_2 : P_3 = 3 : 6 : 10$$

$$P_1 = 3k^2$$

$$P_2 = 6k^2$$

$$P_3 = 10k^2$$

$$2P_1 + 2P_2 + 2P_3 = 190$$

$$2(3k^2 + 6k^2 + 10k^2) = 190$$

$$P_1 = 3k^2 = 3 \cdot 5 = 15$$

$$2 \cdot 19k^2 = 190 / :19$$

$$P_2 = 6k^2 = 6 \cdot 5 = 30 \quad \leftarrow \quad 2k^2 = 10 / :2$$

$$P_3 = 10k^2 = 10 \cdot 5 = 50 \quad \quad \quad k^2 = 5$$

$$P_1 = a \cdot b$$

$$P_2 = b \cdot c$$

$$P_3 = a \cdot c$$

$$\cdot \left\{ \begin{array}{l} 15 = a \cdot b \\ 30 = b \cdot c \\ 50 = a \cdot c \end{array} \right\} \cdot$$

$$15 \cdot 30 \cdot 50 = a \cdot c \cdot b \cdot c \cdot a \cdot c$$

$$22500 = a^2 b^2 c^2 / \sqrt{\quad}$$

$$150 = abc \quad V = a \cdot b \cdot c$$

$$V = 150 \text{ cm}^3$$