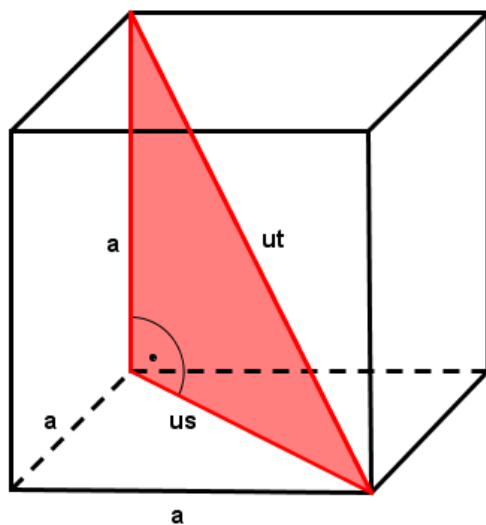


PYTAGOROVA VETA A KOCKA

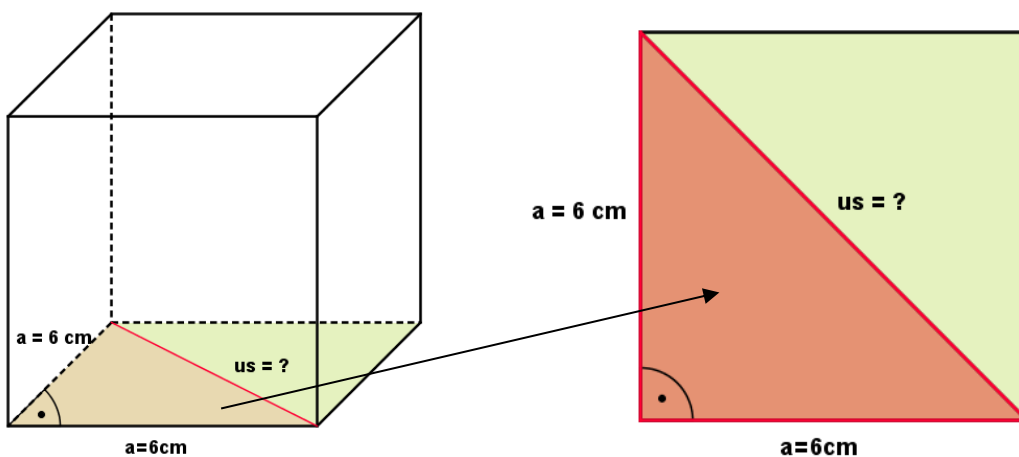


$$PV: c^2 = a^2 + b^2$$

$$u_s^2 = a^2 + a^2$$

$$u_{\uparrow}^2 = a^2 + u_s^2$$

1.) Vypočítaj dĺžku stenovej uhlopriečky kocky: $a = 6 \text{ cm}$



$$c^2 = a^2 + b^2$$

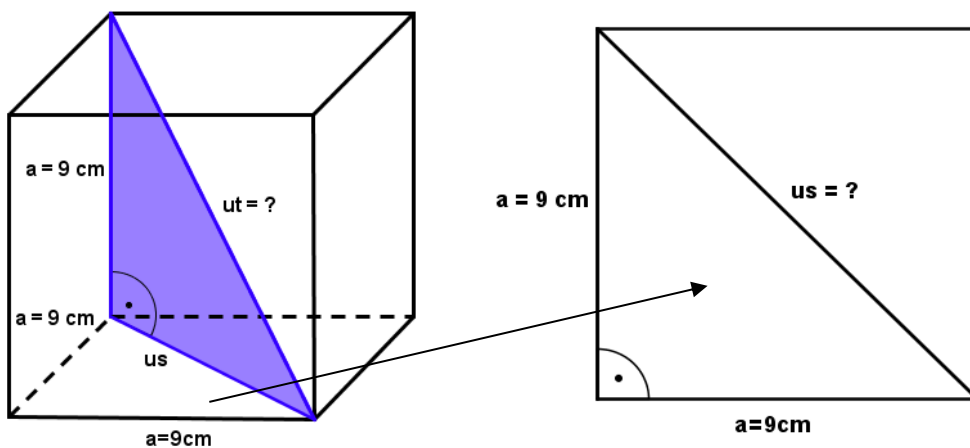
$$u_s^2 = 6^2 + 6^2$$

$$u_s^2 = 36 + 36$$

$$u_s^2 = 72$$

$$u_s = 8,49 \text{ cm}$$

2.) Vypočítaj dĺžku telesovej uhlopriečky kocky s hranou dlhou 9 cm



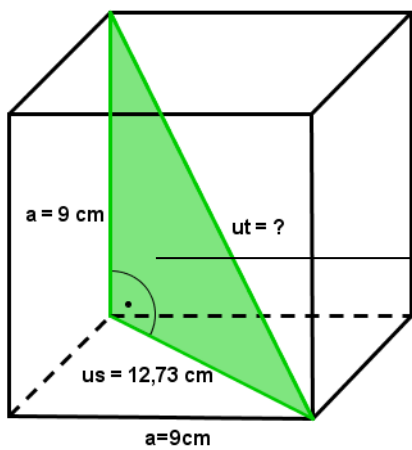
$$c^2 = a^2 + b^2$$

$$u_s^2 = 9^2 + 9^2$$

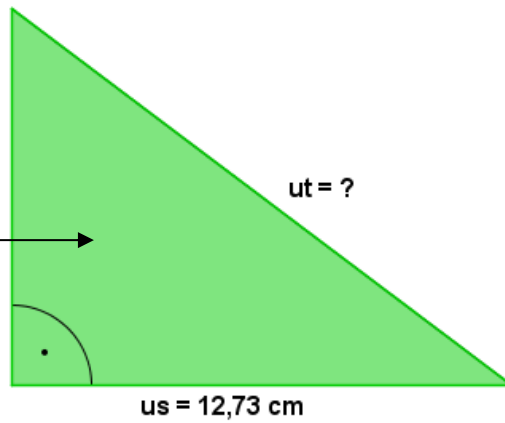
$$u_s^2 = 81 \cdot 2$$

$$u_s^2 = 162$$

$$u_s = 12,73 \text{ cm}$$



a = 9 cm



$$c^2 = a^2 + b^2$$

$$u_t^2 = 9^2 + 12,73^2$$

$$u_t^2 = 81 + 162$$

$$u_t^2 = 243$$

$$u_t = 15,59 \text{ cm}$$

3.) Vypočítaj dĺžku telesovej uhlopriečky kocky s hranou dlhou 11 cm

4.) Vypočítaj povrch; objem; dĺžku stenovej a telesovej uhlopriečky kocky na obrázku:

