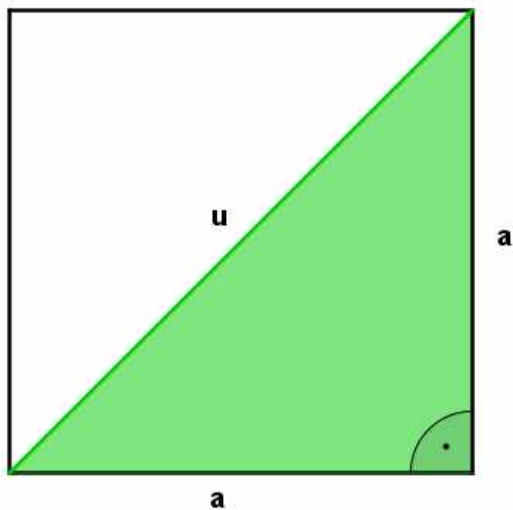
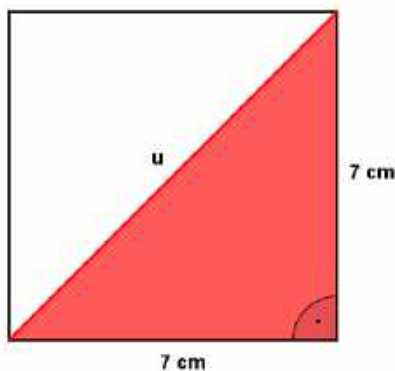


PYTAGOROVA VETA A ŠTVOREC



$$\begin{aligned} \text{PV: } c^2 &= a^2 + b^2 \\ u^2 &= a^2 + a^2 \\ u^2 &= 2a^2 \end{aligned}$$

1.) Vypočítaj dĺžku uhlopriečky štvorca so stranou $a = 7 \text{ cm}$

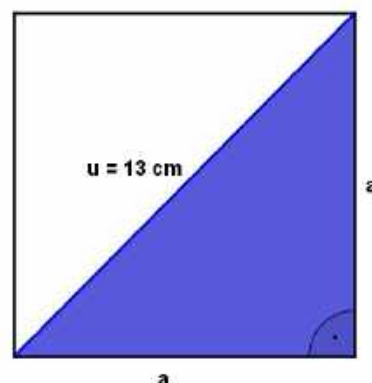


$$\begin{aligned} c^2 &= a^2 + b^2 \\ u^2 &= 7^2 + 7^2 \\ u^2 &= 98 \\ \underline{u &= 9,9 \text{ cm}} \end{aligned}$$

2.) Vypočítaj obvod a obsah štvorca: $u = 13 \text{ cm}$

$$\begin{aligned} c^2 &= a^2 + b^2 \\ u^2 &= a^2 + a^2 \\ 13^2 &= a^2 + a^2 \\ 169 &= 2a^2 \\ a^2 &= 169 : 2 \\ a^2 &= 84,5 \\ a &= 9,19 \text{ cm} \end{aligned}$$

$$\begin{aligned} o &= 4 \cdot a \\ o &= 4 \cdot 9,19 \\ \underline{o &= 36,77 \text{ cm}} \\ S &= a^2 \\ \underline{S &= 84,5 \text{ cm}^2} \end{aligned}$$



3.) Vypočítaj obvod a obsah štvorca, ak jeho uhlopriečka je dlhá $15,75 \text{ cm}$.

4.) Zisti dĺžku uhlopriečky štvorca so stranou dlhou $11,3 \text{ cm}$