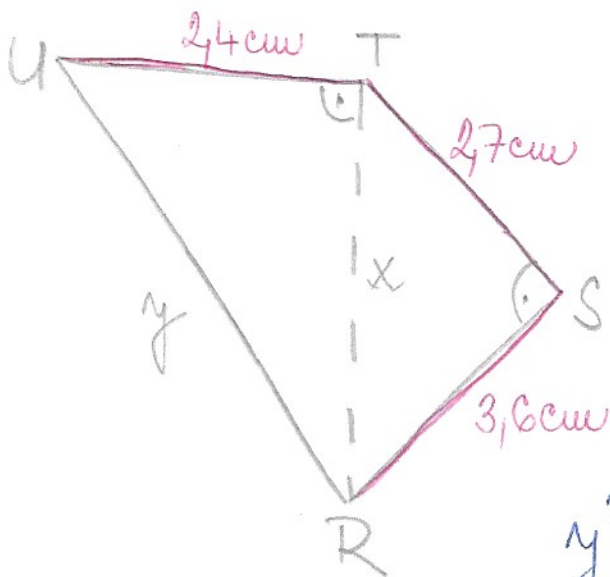


1. - 8. 4. 2020

ŘEŠENÍ

PRO  
RYCHLÍKY

1)



$$x^2 = 3,6^2 + 27^2$$

$$x^2 = 12,96 + 729$$

$$x^2 = 20,25$$

$$x = \sqrt{20,25}$$

$$x = 4,5 \text{ cm}$$

$$\sigma = 3,6 + 27 + 24 + 5,1$$

$$\sigma = 13,8 \text{ cm}$$

$$y^2 = x^2 + 24^2$$

$$y^2 = 20,25 + 576$$

$$y^2 = 26,01$$

$$y = 5,1 \text{ cm}$$

$$S_{\Delta 1} = \frac{3,6 \cdot 27}{2}$$

$$S_{\Delta 1} = 4,86 \text{ cm}^2$$

$$S_{\Delta 2} = \frac{24 \cdot x}{2}$$

$$S_{\Delta 2} = \frac{24 \cdot 4,5}{2}$$

$$S_{\Delta 2} = 5,4 \text{ cm}^2$$

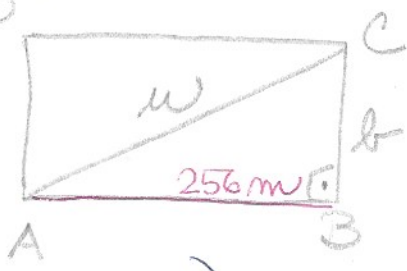
$$S = S_{\Delta 1} + S_{\Delta 2}$$

$$S = 4,86 + 5,4$$

$$S = 10,26 \text{ cm}^2$$

Obvod 4-úhelníku  
RSTU je 13,8 cm, jeho  
obsah je 10,26 cm<sup>2</sup>.

2) ABCD:  $a = 256\text{ m}$   
 $S = 49152\text{ ha} = 49152\text{ m}^2$   
 $b = ?\text{ m}$   
 $u = ?\text{ m}$

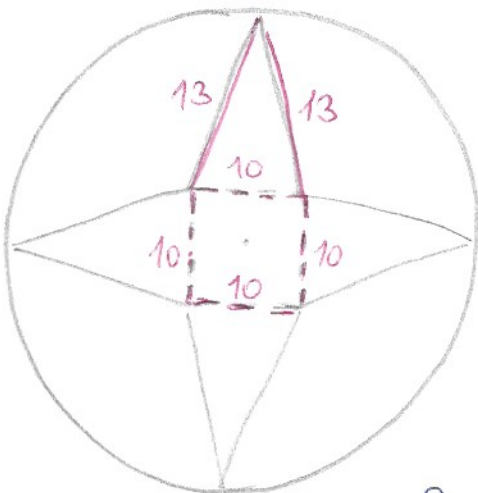


a)  $S = a \cdot b$   
 $49152 = 256 \cdot b$   
 $b = 49152 : 256$   
 $b = 192\text{ m}$

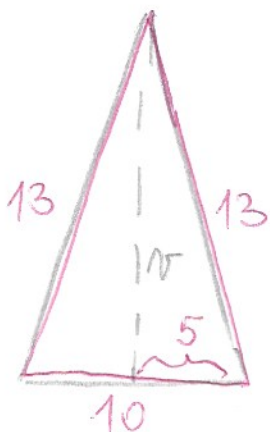
b)  $u^2 = a^2 + b^2$   
 $u^2 = 256^2 + 192^2$   
 $u^2 = 65536 + 36864$   
 $u^2 = 102400$   
 $u = \sqrt{102400}$   
 $u = 320\text{ m}$

úv  
 Šírka pole je 192 m,  
 délka rybníku je 320 m.

3)



$S_{\square} = 100\text{ cm}^2$   
 $S_{\square} = a^2$   
 $100 = a^2$   
 $a = \sqrt{100}$   
 $a = 10\text{ cm}$

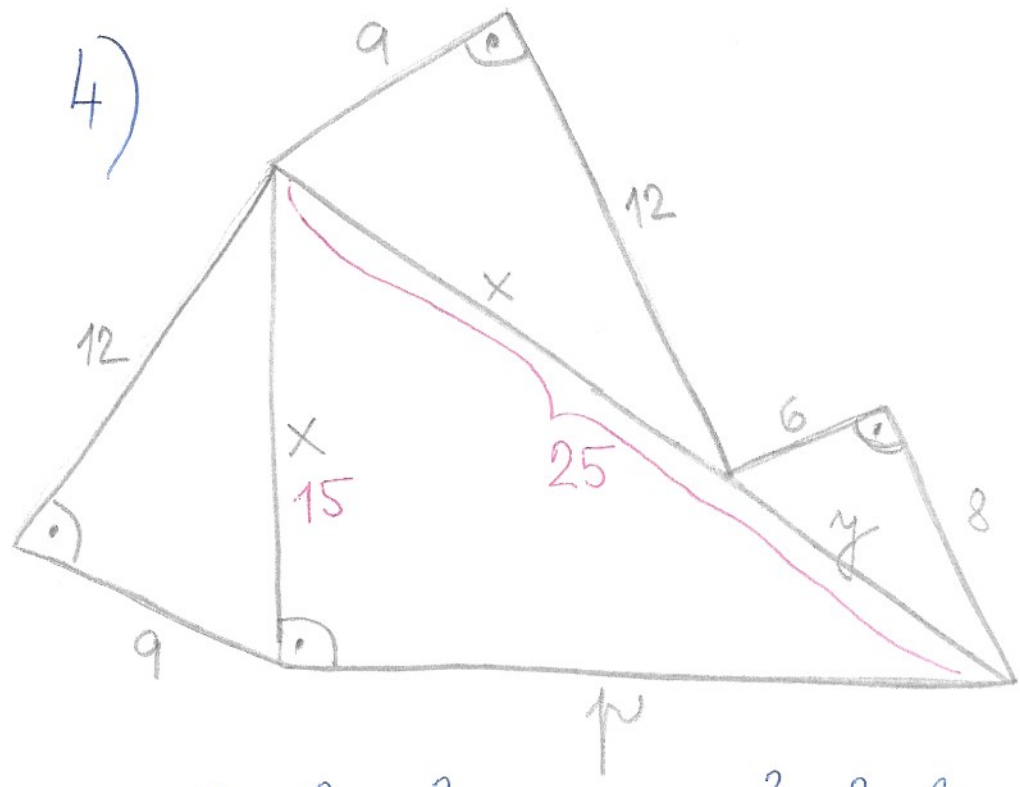


$13^2 = n^2 + 5^2$   
 $169 = n^2 + 25$   
 $n^2 = 169 - 25$   
 $n^2 = 144$   
 $n = \sqrt{144}$   
 $n = 12\text{ cm}$

$S_{\Delta} = \frac{10 \cdot 12}{2}$   
 $S_{\Delta} = 60\text{ cm}^2$

$S_H = S_{\square} + 4 \cdot S_{\Delta}$   
 $S_H = 100 + 4 \cdot 60$   
 $S_H = 340\text{ cm}^2$

Obsah kruhy je 340 cm<sup>2</sup>.



$$\begin{aligned}
 x^2 &= 9^2 + 12^2 \\
 x^2 &= 81 + 144 \\
 x^2 &= 225 \\
 x &= \sqrt{225} \\
 x &= 15 \text{ cm}
 \end{aligned}$$

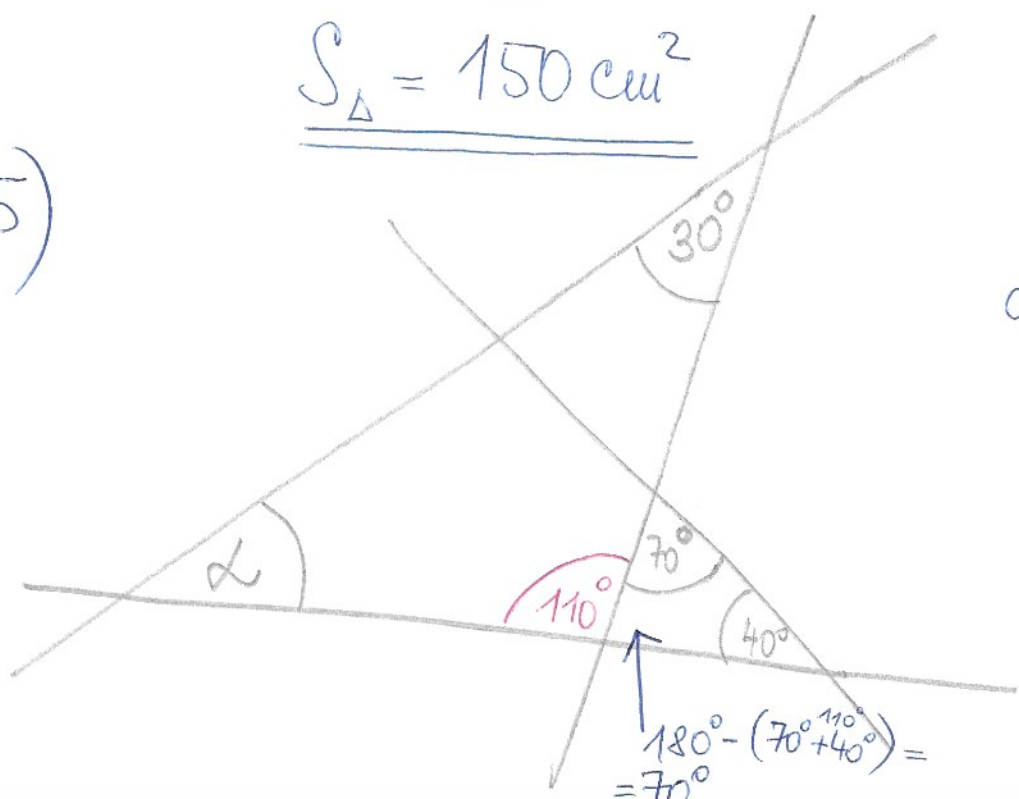
$$\begin{aligned}
 y^2 &= 6^2 + 8^2 \\
 y^2 &= 36 + 64 \\
 y^2 &= 100 \\
 y &= \sqrt{100} \\
 y &= 10 \text{ cm}
 \end{aligned}$$

$$\begin{aligned}
 x + y &= 25 \text{ cm} \\
 25^2 &= 15^2 + p^2 \\
 625 &= 225 + p^2 \\
 p^2 &= 625 - 225 \\
 p^2 &= 400 \\
 p &= \sqrt{400} \\
 p &= 20 \text{ cm}
 \end{aligned}$$

$$S_{\Delta} = \frac{20 \cdot 15}{2}$$

$$S_{\Delta} = 150 \text{ cm}^2$$

5)



$$\begin{aligned}
 \alpha + 30^\circ + 110^\circ &= 180^\circ \\
 \alpha &= 180^\circ - 140^\circ \\
 \alpha &= 40^\circ
 \end{aligned}$$

$$180^\circ - (70^\circ + 40^\circ) = 70^\circ$$