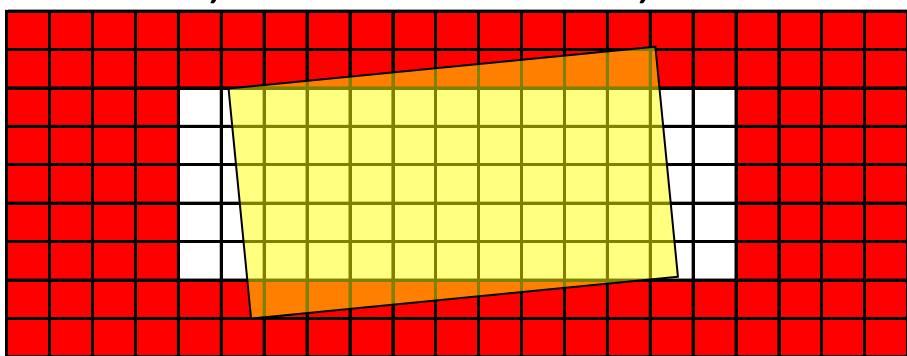
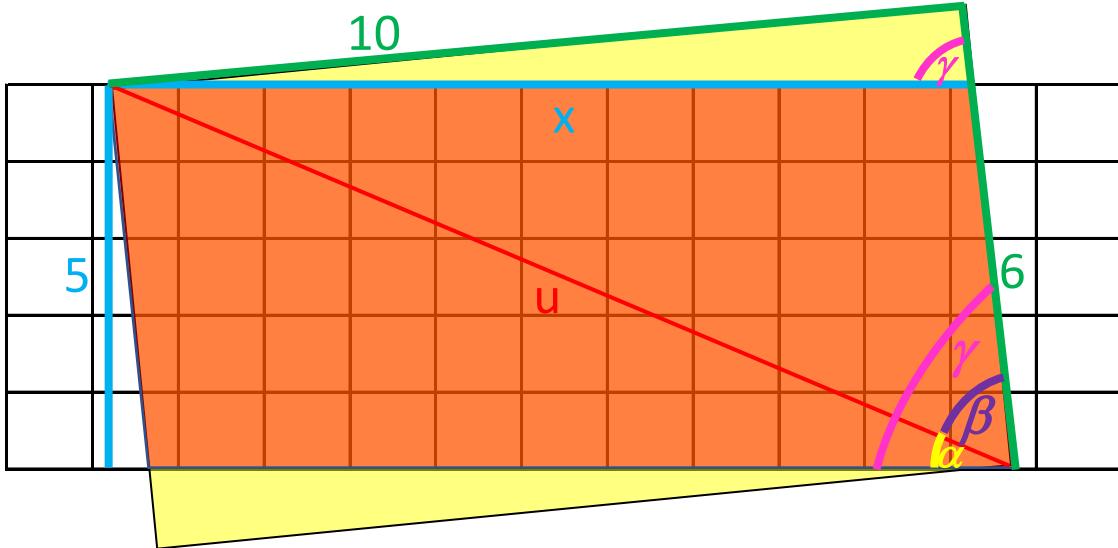


$$P=400,237692 \quad M=9,112952$$



6 okolních obdélníků zakrývá celkem 350 políček
vnitří obdélník, který je částečně zakryt žlutým pootočeným
obdélníkem je o velikosti 5 x 13 políček (65 políček)



$$u = \sqrt{10^2 + 6^2} = \sqrt{136}$$

$$\sin \alpha = \frac{5}{u} \Rightarrow \alpha = \sin^{-1} \frac{5}{u}$$

$$\sin \beta = \frac{10}{u} \Rightarrow \beta = \sin^{-1} \frac{10}{u}$$

$$\gamma = \alpha + \beta$$

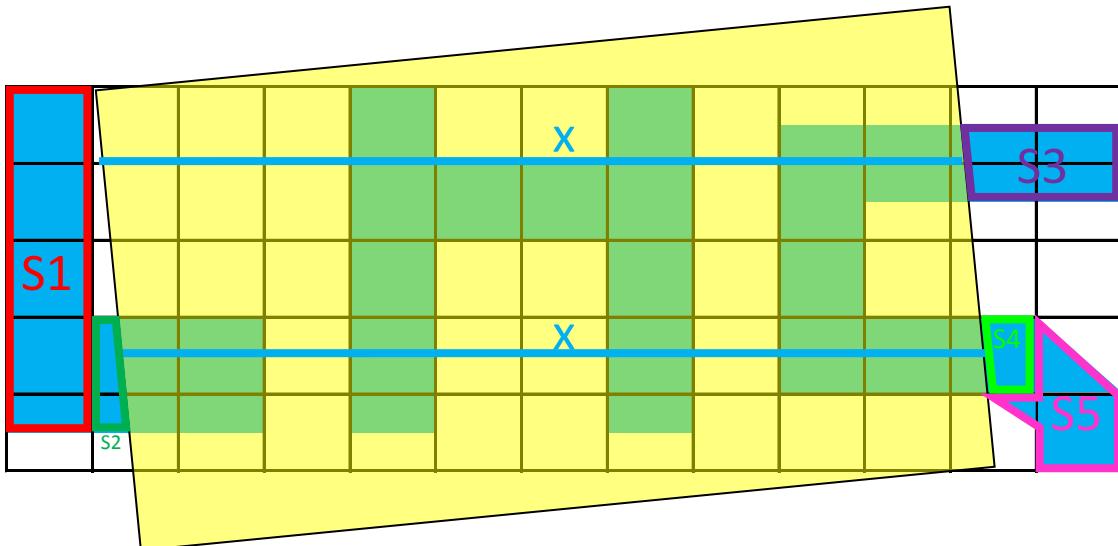
$$\sin \gamma = \frac{10}{x} \Rightarrow x = \frac{10}{\sin \gamma}$$

$u = 11,661904$
 $\alpha = 0,443105$
 $\beta = 1,030377$
 $\gamma = 1,473482$
 $x = 10,047538$

Plocha oranžového rovnoběžníku, tj. plocha zakrytá navíc nad 350 políček je rovna $5 \cdot x$
Odtud

$$P = 400,237692$$

Varianta se zeleným bodem v [7;11]



$$S_1 = 4,5 \quad S_1 = 4,500000$$

$$S_2 = \frac{1}{2} \cdot 4,5 \cdot \frac{4,5}{\tan \gamma} - \frac{1}{2} \cdot 3 \cdot \frac{3}{\tan \gamma} \quad S_2 = 0,549130$$

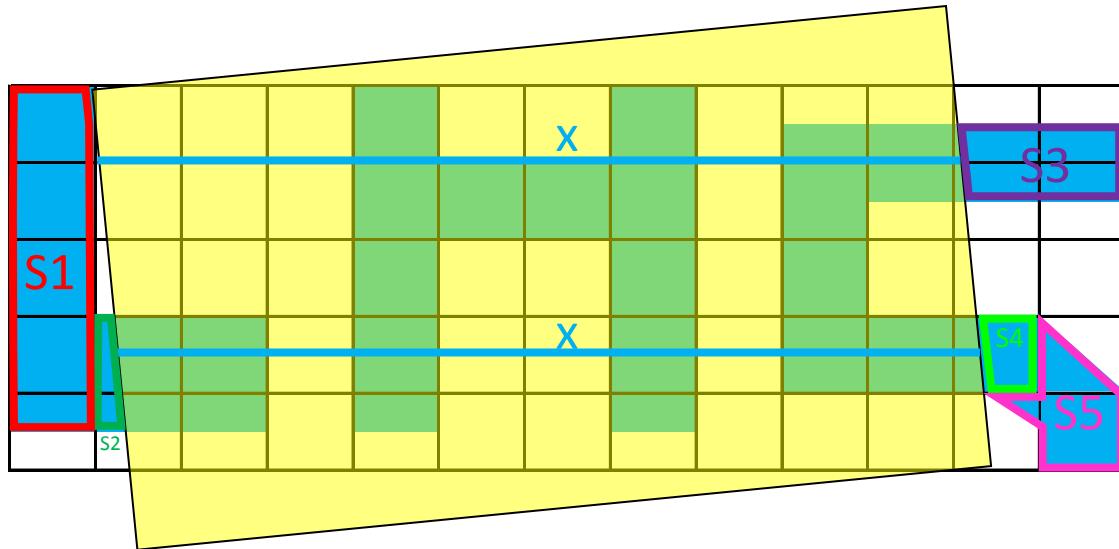
$$S_3 = 1 \cdot \left(12 - x - \frac{1}{\tan \gamma} \right) \quad S_3 = 1,854839$$

$$S_4 = 1 \cdot \left(11 - x - \frac{3,5}{\tan \gamma} \right) \quad S_4 = 0,610781$$

$$S_5 = 1 + 0,5 + 0,086 \quad S_5 = 1,586000$$

$$M = 9,100749$$

Varianta se zeleným bodem v [7;10,5]



$$S_1 = 4,5 - \frac{1}{2} \cdot 0,5 \cdot \frac{0,5}{\tan \gamma}$$

S1= 4,487797

$$S_2 = \frac{1}{2} \cdot 4 \cdot \frac{4}{\tan \gamma} - \frac{1}{2} \cdot 2,5 \cdot \frac{2,5}{\tan \gamma}$$

S2= 0,475913

$$S_3 = 1 \cdot \left(12 - x - \frac{0,5}{\tan \gamma} \right)$$

S3= 1,903650

$$S_4 = 1 \cdot \left(11 - x - \frac{3}{\tan \gamma} \right)$$

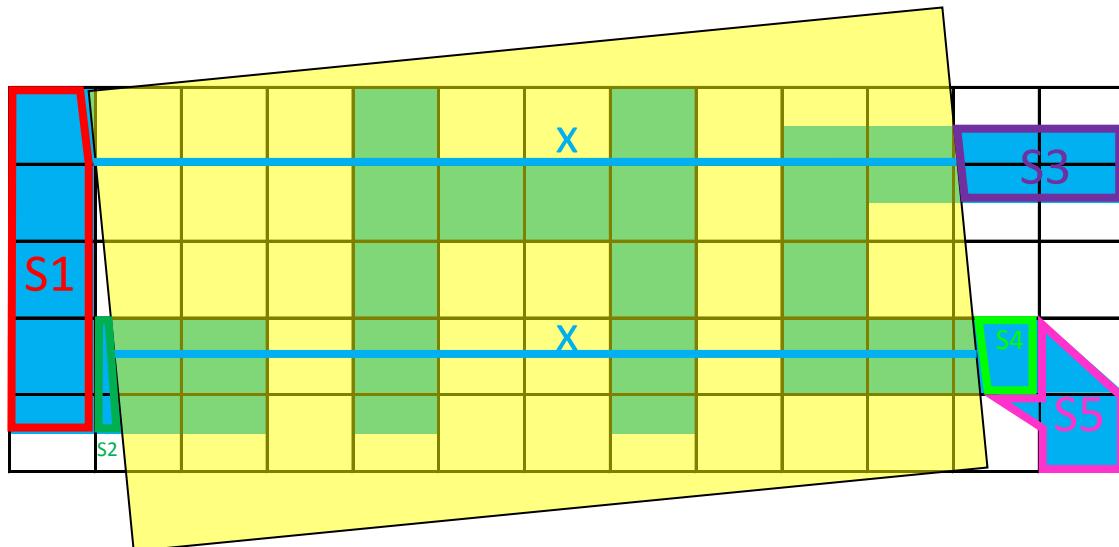
S4= 0,659592

$$S_5 = 1 + 0,5 + 0,086$$

S5= 1,586000

M= 9,112952

Varianta se zeleným bodem v [7;10]



$$S_1 = 4,5 - \frac{1}{2} \cdot 1 \cdot \frac{1}{\tan \gamma}$$

S1= 4,451188

$$S_2 = \frac{1}{2} \cdot 3,5 \cdot \frac{3,5}{\tan \gamma} - \frac{1}{2} \cdot 2 \cdot \frac{2}{\tan \gamma}$$

S2= 0,402695

$$S_3 = 1 \cdot (12 - x)$$

S3= 1,952462

$$S_4 = 1 \cdot \left(11 - x - \frac{2,5}{\tan \gamma} \right)$$

S4= 0,708404

$$S_5 = 1 + 0,5 + 0,086$$

S5= 1,586000

M= 9,100749