

Izra una emo si 75° bez koriš enja kalkulatora:

$$\sin 75^\circ = \sin (45^\circ + 30^\circ) = \sin 45^\circ \cos 30^\circ + \cos 45^\circ \sin 30^\circ$$

$$\sin 75^\circ = \frac{\sqrt{2}}{2} \cdot \frac{\sqrt{3}}{2} + \frac{\sqrt{2}}{2} \cdot \frac{1}{2} = \frac{\sqrt{2}(\sqrt{3}+1)}{4}$$

$$\gg a = \frac{4\sqrt{2} \cdot \frac{\sqrt{2}(\sqrt{3}+1)}{4}}{\frac{\sqrt{3}}{2}} = \frac{4(\sqrt{3}+1)}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{4\sqrt{3}(\sqrt{3}+1)}{3} = \frac{4(3+\sqrt{3})}{3}$$

$$\gg \gamma = 180^\circ - (\alpha + \beta) = 180^\circ - (75^\circ + 60^\circ) = 180^\circ - 135^\circ = 45^\circ$$

Površina trougla je:

$$P = \frac{a}{2} \cdot b \cdot \sin \gamma = \frac{\frac{4(3+\sqrt{3})}{3} \cdot 4\sqrt{2} \cdot \sin 45^\circ}{2} = \frac{\frac{4(3+\sqrt{3})}{3} \cdot 4\sqrt{2} \cdot \frac{\sqrt{2}}{2}}{2} = \frac{1}{2} \cdot \frac{4(3+\sqrt{3})}{3} = \frac{8(3+\sqrt{3})}{3}$$

$$\gg P = \frac{8(3+\sqrt{3})}{3} \text{ m}^2$$

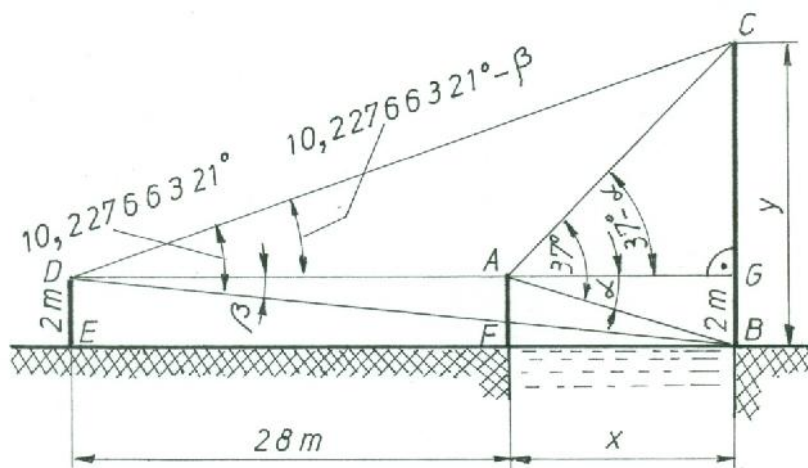
498. Sve oznake odnose se na crtež ispod.

Trougao A :

$$t_1 = \frac{2}{x} \quad t_1 (37^\circ - \alpha) = \frac{y-2}{x}$$

$$\gg t_1 (37^\circ - \alpha) = \frac{t_3 \cdot \frac{2}{x} - t_1}{1 + t_3 \cdot t_1} = \frac{t_3 \cdot \frac{2}{x} - \frac{2}{x}}{1 + t_3 \cdot \frac{2}{x}}$$

$$\gg \frac{t_3 \cdot \frac{2}{x} - \frac{2}{x}}{1 + t_3 \cdot \frac{2}{x}} = \frac{y-2}{x}$$



$$\frac{\frac{0,7}{x+0,7} \cdot \frac{x-2}{x}}{x} = \frac{y-2}{x}$$