Zadatak 4. Odredi unutarnje kutove trokuta kojem stranice leže na pravcima $x-y+4=0$, $x+2y=0$ i $3x-y+11=0$.

Rješenje.

$a \ \ldots \ x-y+4=0$

$b \ \ldots \ x+2y=0$

$c \ \ldots \ \underline{3x-y+11=0}$

$y=x+4$

$2y=-x$

$\underline{y=3x-11}$

$y=x+4$

$y=-\frac{1}{2}x$

$\underline{y=3x-11}$

$k_a=1, \quad k_b=-\frac{1}{2}, \quad k_c=3$

$$\operatorname{tg}\gamma=\operatorname{tg}\sphericalangle(a,b)=\left|\frac{k_b-k_a}{1+k_ak_b}\right|=\left|\frac{-\frac{1}{2}-1}{1+1\cdot\left(-\frac{1}{2}\right)}\right|=\left|\frac{\frac{-3}{2}}{\frac{1}{2}}\right|=3 \implies \gamma=71°34'$$

$$\operatorname{tg}\alpha=\operatorname{tg}\sphericalangle(b,c)=\left|\frac{k_c-k_b}{1+k_bk_c}\right|=\left|\frac{3-1}{1+3\cdot 1}\right|=\left|\frac{2}{-4}\right|=\frac{1}{2} \implies \beta=26°34'$$

$$\operatorname{tg}\beta=\operatorname{tg}\sphericalangle(b,c)=\left|\frac{k_c-k_a}{1+k_ak_c}\right|=\left|\frac{3+\frac{1}{2}}{1+3\cdot\left(-\frac{1}{2}\right)}\right|=\left|\frac{\frac{7}{2}}{-\frac{1}{2}}\right|=7 \implies \alpha=81°52'$$