Zadatak 12. Odredi arkus kotangens iz zadane vrijednosti kotagensa:

1) $\operatorname{ctg}\alpha = 3.51551$; **2)** $\operatorname{ctg}\alpha = 0.11226$;
3) $\operatorname{ctg}\alpha = 0.097$; **4)** $\operatorname{ctg}\alpha = 1.38934$;
5) $\operatorname{ctg}\alpha = -0.75353$; **6)** $\operatorname{ctg}\alpha = -13.3567$.

Rješenje. **1)** $\operatorname{ctg}\alpha = 3.51551 \implies \operatorname{tg}\alpha = \dfrac{1}{3.51551} = 0.284453749 \implies \alpha = \operatorname{arc\,tg} 0.284453749 = 15.87860^\circ = 15^\circ 52' 43''$;

2) $\operatorname{ctg}\alpha = 0.11226 \implies \operatorname{tg}\alpha = \dfrac{1}{0.11226} = 8.907892393 \implies \alpha = \operatorname{arc\,tg} 8.907892393 = 83.59479276^\circ \alpha = 83^\circ 35' 41''$;

3) $\operatorname{ctg}\alpha = 0.097 \implies \operatorname{tg}\alpha = \dfrac{1}{0.097} = 10.30927835 \implies \alpha = \operatorname{arc\,tg} 10.30927835 = 84.45964241^\circ \alpha = 84^\circ 27' 35''$;

4) $\operatorname{ctg}\alpha = 1.389341 \implies \operatorname{tg}\alpha = \dfrac{1}{1.38934} = 0.719766219 \implies \alpha = \operatorname{arc\,tg} 0.719766219 = 35.74506475^\circ \alpha = 35^\circ 44' 42''$;

5) $\operatorname{ctg}\alpha = -0.75353 \implies \operatorname{tg}\alpha = \dfrac{1}{-0.75353} = -1.327087176 \implies \alpha = \operatorname{arc\,tg} -1.327087176 = -53.0008789^\circ \alpha = -53^\circ 3''$;

6) $\operatorname{ctg}\alpha = -13.3567 \implies \operatorname{tg}\alpha = \dfrac{1}{-13.3567} = -0.074868792 \implies \alpha = \operatorname{arc\,tg} -0.074868792 = -4.281677667^\circ \alpha = -4^\circ 16' 54''$.