Zadatak 10. Odredi glavnu mjeru kuta α ako je:

1) $\alpha = 555^\circ$; **2)** $\alpha = 2\,000^\circ$;
3) $\alpha = 7\,770^\circ$; **4)** $\alpha = 678^\circ$;
5) $\alpha = 1\,987^\circ$; **6)** $\alpha = 3\,600^\circ$.

Rješenje.

1) $\alpha = 555^\circ$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 555^\circ - \left\lfloor \frac{555^\circ}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 555^\circ - \lfloor 1.542 \rfloor \cdot 360^\circ$$
$$\alpha' = 555^\circ - 1 \cdot 360^\circ$$
$$\alpha' = 195^\circ; \quad \{195^\circ + k \cdot 360^\circ,\ k \in \mathbf{Z}\}$$

2) $\alpha = 2000^\circ$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 2000^\circ - \left\lfloor \frac{2000^\circ}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 2000^\circ - \lfloor 5.5 \rfloor \cdot 360^\circ$$
$$\alpha' = 2000^\circ - 5 \cdot 360^\circ$$
$$\alpha' = 2000^\circ - 1800^\circ$$
$$\alpha' = 200^\circ; \quad \{200^\circ + k \cdot 360^\circ,\ k \in \mathbf{Z}\}$$

3) $\alpha = 7770^\circ$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 7770^\circ - \left\lfloor \frac{7770^\circ}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 7770^\circ - \lfloor 21.5 \rfloor \cdot 360^\circ$$
$$\alpha' = 7770^\circ - 21 \cdot 360^\circ$$
$$\alpha' = 7770^\circ - 7560^\circ$$
$$\alpha' = 210^\circ; \quad \{210^\circ + k \cdot 360^\circ,\ k \in \mathbf{Z}\}$$

4) $\alpha = 678^\circ$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 678^\circ - \left\lfloor \frac{678^\circ}{360^\circ} \right\rfloor \cdot 360^\circ$$
$$\alpha' = 678^\circ - \lfloor 1.88 \rfloor \cdot 360^\circ$$
$$\alpha' = 678^\circ - 1 \cdot 360^\circ$$
$$\alpha' = 318^\circ; \quad \{318^\circ + k \cdot 360^\circ,\ k \in \mathbf{Z}\}$$

5) $\alpha = 1987°$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360°} \right\rfloor \cdot 360°$$
$$\alpha' = 1987° - \left\lfloor \frac{1987°}{360°} \right\rfloor \cdot 360°$$
$$\alpha' = 1987° - \lfloor 5.52 \rfloor \cdot 360°$$
$$\alpha' = 1987° - 5 \cdot 360°$$
$$\alpha' = 1987° - 1800°$$
$$\alpha' = 187°; \quad \{187° + k \cdot 360°,\ k \in \mathbf{Z}\}$$

6) $\alpha = 3600°$

$$\alpha' = \alpha - \left\lfloor \frac{\alpha}{360°} \right\rfloor \cdot 360°$$
$$\alpha' = 3600° - \left\lfloor \frac{3600°}{360°} \right\rfloor \cdot 360°$$
$$\alpha' = 3600° - \lfloor 10 \rfloor \cdot 360°$$
$$\alpha' = 3600° - 10 \cdot 360°$$
$$\alpha' = 3600° - 3600°$$
$$\alpha' = 0°; \quad \{0° + k \cdot 360°,\ k \in \mathbf{Z}\}$$