6) $h = 70000 \frac{km^2}{s}$ ^ $\epsilon = -10 \frac{km^2}{s^2}$

$$\epsilon = -\frac{\mu}{2a} \Rightarrow a = -\frac{\mu}{2\epsilon} = \frac{398600{,}4418 \; s^2 km^3}{2 \cdot (-10) \; km^2 \; s^2}$$

$a = 19930 km$

$$e = \sqrt{1 - \frac{h^2}{\mu a}} = 0{,}62$$

$r_p = a(1-e) = 7573{,}4 km \rightarrow h_p = r_p - R_T$

$r_a = a(1+e) = 32286{,}6 km \rightarrow h_a = r_a - R_T$

**$h_p = 1202{,}4 km$ ^ $h_a = 25915{,}6 km$**