

$$4) h_a = 600 \text{ km} \quad \wedge \quad h_p = 400 \text{ km}$$

$$r_a = 6378 + 600 = 6978 \text{ km}$$

$$r_p = 6378 + 400 = 6778 \text{ km}$$

$$a = \frac{r_a + r_p}{2} = 6878 \text{ km}$$

$$T = 2\pi \sqrt{\frac{a^3}{\mu}} = 2\pi \sqrt{\frac{(6878)^3 \text{ km}^3 \text{ s}^2}{398600,4418 \text{ km}^3}} = 5676,8 \text{ s}$$

$$\frac{T}{2} = 2838,4 \text{ s} \rightarrow 47,33 \text{ minutos}$$