

10. The metric prefixes (micro (μ), pico, nano, ...) are given for ready reference on the inside front cover of the textbook (also, Table 1-2).

$$\begin{aligned}1\,\mu\text{century} &= (10^{-6}\text{ century})\left(\frac{100\,\text{y}}{1\text{ century}}\right)\left(\frac{365\,\text{day}}{1\,\text{y}}\right)\left(\frac{24\,\text{h}}{1\,\text{day}}\right)\left(\frac{60\,\text{min}}{1\,\text{h}}\right) \\ &= 52.6\,\text{min} .\end{aligned}$$

The percent difference is therefore

$$\frac{52.6\,\text{min} - 50\,\text{min}}{50\,\text{min}} = 5.2\% .$$