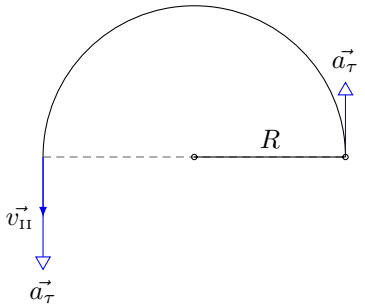

$$\langle v \rangle = \frac{S}{t} = \frac{\pi R}{\tau} = \frac{3.14 \cdot 1.6}{10} = 0.5 \text{ m/s}$$
$$|\langle \vec{v} \rangle| = |\frac{\Delta \vec{r}}{\Delta t}| = \frac{2R}{\tau} = \frac{2 \cdot 1.6}{10} = 0.32 \text{ m/s}$$
$$|\langle \vec{a} \rangle| = |\frac{\Delta \vec{v}}{\Delta t}| = \frac{v_{\text{II}_\tau}}{\tau}$$

$$v_\tau = a_\tau \cdot t$$
$$S = \pi R = \int_0^\tau a_\tau t \, dt = \frac{a\tau^2}{2}$$
$$a_\tau = \frac{2\pi R}{\tau^2}$$
$$v_{\text{II}_\tau} = a_\tau \cdot \tau = \frac{2\pi R}{\tau}$$
$$|\langle \vec{a} \rangle| = \frac{v_{\text{II}_\tau}}{\tau} = \frac{2\pi R}{\tau^2} = \frac{2 \cdot 3.14 \cdot 1.6}{100} = 0.1 \text{ m/s}^2$$