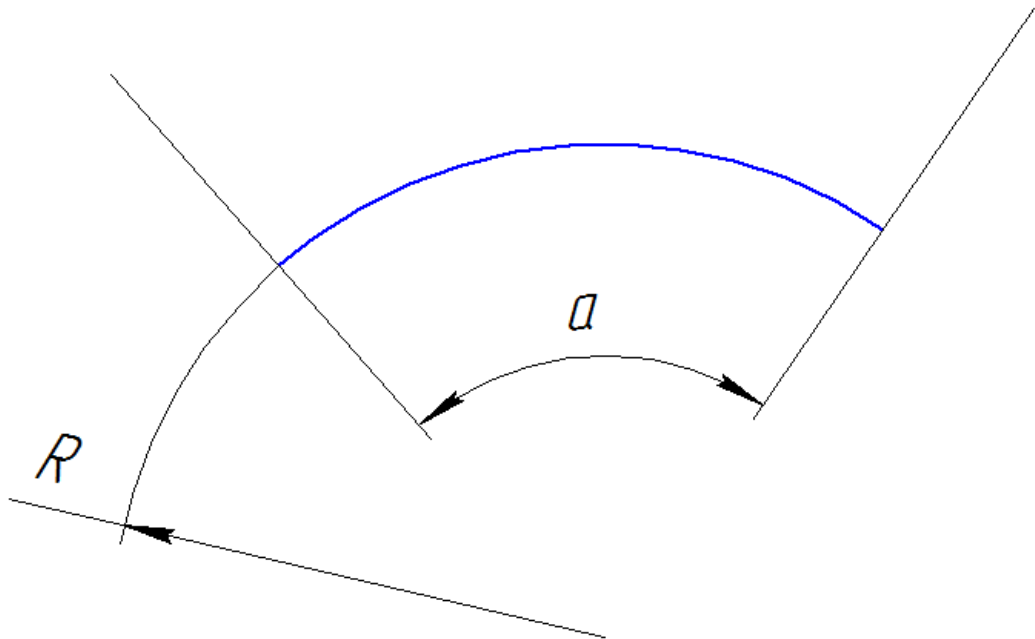**Task:**

Calculate the angular displacement of a circling aircraft which travels 3 Km along the arc of a circle with R=10 Km

Solution:

$$l = \alpha R$$

$$\alpha = \frac{l}{R} = \frac{3\ km}{10\ km} = 0.3\ radians = 0.3 \cdot \frac{180°}{\pi} = 17.189°$$

Answer:

$$\alpha = 17.189°$$