4. If the plane (with velocity v) maintains its present course, and if the terrain continues its upward slope of 4.3°, then the plane will strike the ground after traveling

$$\Delta x = \frac{h}{\tan\theta} = \frac{35\,\text{m}}{\tan 4.3^\circ} = 465.5\ \text{m} \approx 0.465\ \text{km}\ .$$

This corresponds to a time of flight found from Eq. 2-2 (with $v = v_{\text{avg}}$ since it is constant)

$$t = \frac{\Delta x}{v} = \frac{0.465\,\text{km}}{1300\,\text{km/h}} = 0.000358\ \text{h} \approx 1.3\ \text{s}\ .$$

This, then, estimates the time available to the pilot to make his correction.