Turning at a constant altitude and constant speed.

\[ \tan \theta = \frac{F_{\text{lift}}}{mg} \]

\[ F_{\text{lift}} = \frac{mg}{\tan \theta} \]
$$a = \lim_{\Delta t \to 0} \frac{\Delta v}{\Delta t}$$

$$v(\Delta t) - v(0)$$

\[ 15 \]

12 \[ \Delta t \] 12

12 \[ \Delta t \] 12

\[ 15 \]

When the direction is changing, the amplitude is not perpendicular to the direction.
\[
\frac{\overline{12}}{\overline{10}} = \frac{18}{16}
\]
\[ |\mathbf{F}_{\text{net}}| = \frac{mg}{\cos \theta} \]