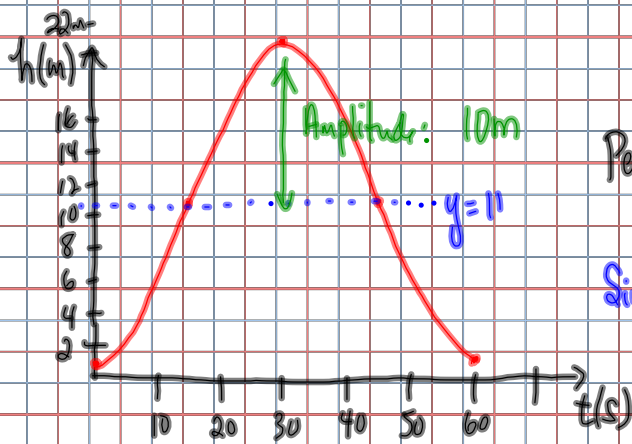
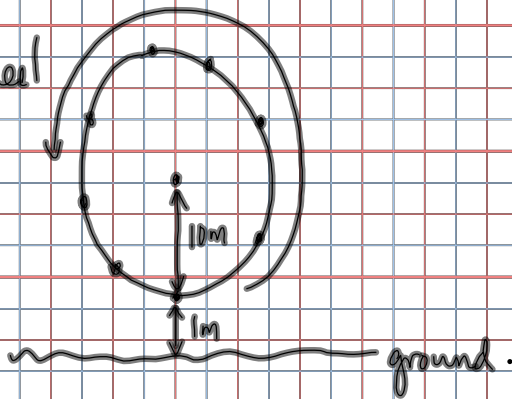


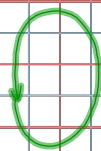
SA: $y = 4$, Amp: 2, Period: 180

Consider a Ferris Wheel



Period: 60s (time for 1 revolution)

Sinusoidal Axis: $y = 11m$ (position of the centre of wheel)



$$C = 2\pi r$$

$$C = 2\pi(10m)$$

$C = 20\pi m$ ← distance travelled in 1 rotation (in 60s)

Amplitude: 10m (radius of the wheel)

$$\text{Speed} = \frac{20\pi m}{60 s} = 1.05 \frac{m}{s}$$