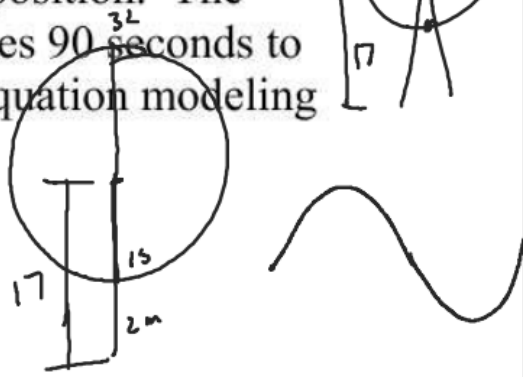
A Ferris wheel in London has a radius of 15 meters and the center of the wheel is set at 17 meters off the ground. It turns counterclockwise, and loads people from a tower at the 3:00 (3 o'clock) position. The wheel turns at a constant rate and takes 90 seconds to complete one revolution. Write an equation modeling this periodic function.



max = 32

min = 2

$A = \frac{max - min}{2}$

$y = 15 \sin \frac{2\pi}{90} t + 17$

$15 \sin \frac{\pi}{45} t + 17$