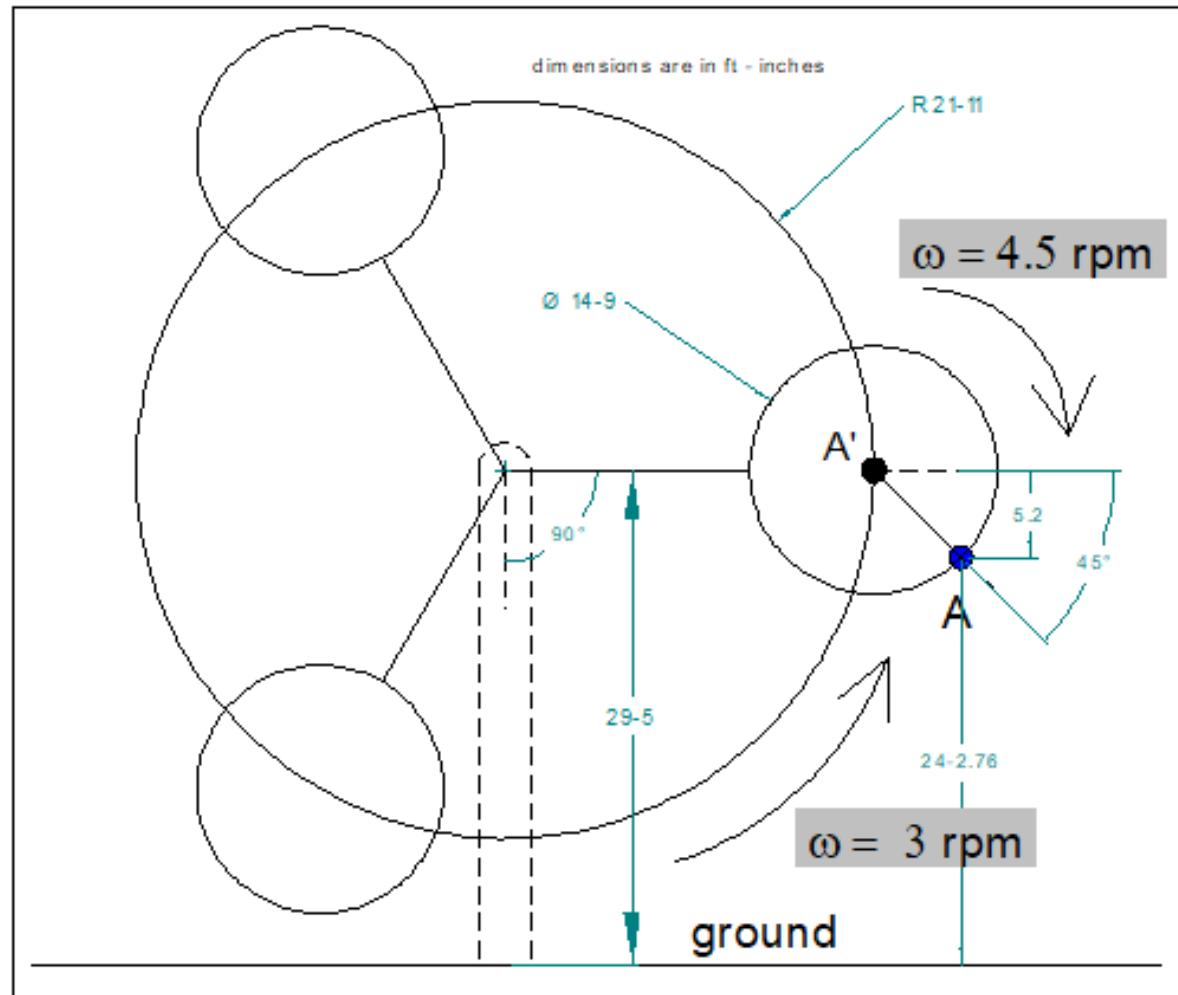


At  $t = 0$  seconds, Point A (not A') is shown in the Ferris wheel sketch to the right.

Determine the:

- 1) Equation of motion of Point A's height =  $f$ ( time [in seconds])
- 2) Height of Point A at  $t = 420$  s.
- 3) Include graphical solution(s) of the equation of motion (height with respect to time in seconds). Use of Google Sheets or MS Excel is recommended.



Present your solution in a professional word processed format with conclusions explicitly stated. Document all supporting calculations and include a graph of vertical displacement vs. time (in seconds).

Extra credit (5 points): "Say you'll never let me go..." was sang by who in what song?