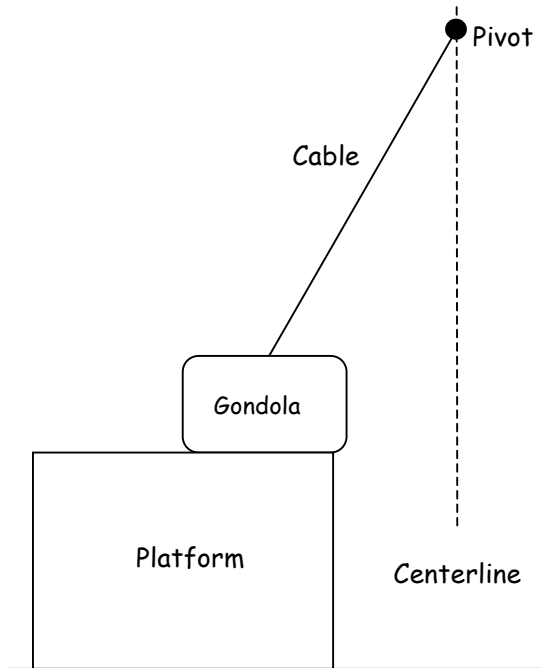


# Super-Swing...Wheel!

Name: \_\_\_\_\_

## Prompt:

Great America Amusement Park (GAAP) is looking into designing a new kid's ride called the "Super-Swing". Your team is being asked to submit a specific design for consideration. The folks at GAAP know the basic layout of the ride, which is shown here to the right. Riders will climb up the platform and load into the gondola. You must design the ride in such a way that the time it takes for the gondola to swing from the platform and back does not change regardless of the number of riders. Although you can't dramatically change the design of the ride, you can make it so that the platform height, the distance of the platform from the centerline, and the length of the cable can be adjusted before each swing. The gondola can hold up to five adults. In addition the fine people at GAAP would like the rider to last for 3 minutes and swing 10 times. They would be greatly impressed if your design could meet this second criterion as well.



Deliverables (Due at the beginning of the block on September 18 (3<sup>rd</sup>, 4<sup>th</sup>) – 19 (5<sup>th</sup>), 2013):

### Written report

- a. Cover Page
- b. Summary of your design (What and Why). No more than a page.
- c. Detailed explanation of your design (What, Why & How). No page limit. This section will include all the details of your design process, and the details of any investigation you undertake during the design process. Provide evidence for your decisions. Use the data from your investigations.
- d. The written report should be in Standard English, and revised and edited as necessary