

5-2)

Consider a Ferris wheel that is 100m in diameter and which rotates once every 60 seconds.

- a) Find the (tangential) speed of a passenger.
- b) If said passenger has a weight of 880 N, what will be his apparent weight at the top of the wheel?
- c) What will be his apparent weight at the bottom of the wheel?
- d) In what time would the wheel need to rotate once (the period) if the passenger's apparent weight at the top were to be zero?

HINT: What does the question mean by 'apparent weight?' What is the question actually asking for? Recall our class discussion.