Warm up:

The man’s wheelchair is rotating while his feet are revolving around him.

The man’s feet have a higher tangential velocity than the man’s knees.

The man’s shoulders and feet have the same rotational velocity.

Decrease linear—slow the whole thing down, move toward the middle.
Angular velocity—drag his feet to sop the rotation of the carousel.

Centripetal force:

Roundabout is 5 meters in radius—1000 kg car is going 7 m/s. How much frictional force?

9,800N

What is the maximum speed if car can generate 20,000 N of frictional force?

10 m/s

Driving and hit an icy patch- keep going in straight line because of inertia—no more centripetal force.