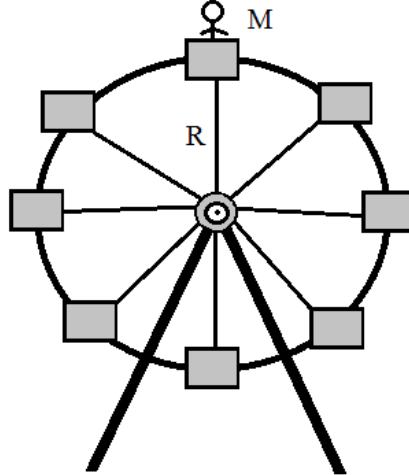


Ferris Wheel Centripetal Force

An amusement park has several Ferris wheels (rotating circular structures) of varying size. The radii, R , of these wheels, as well as the mass, M , of different passengers, are listed below.



Scenario	M	R
A	75 kg	26 m
B	60 kg	52 m
C	100 kg	13 m
D	120 kg	26 m
E	60 kg	13 m
F	80 kg	40 m

For each scenario, rank the minimum velocity necessary for the passenger to momentarily lose contact with their seat when they reach the top of the Ferris wheel.

Largest 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ Smallest

Justify your ranking: