

Centripetal Force

The net force required to hold an object in circular motion

Must always point toward the center of the circle.

It's not a force on its own - it's just the required amount to be in circular motion.

It could be provided by Friction or Normal Force or Tension.

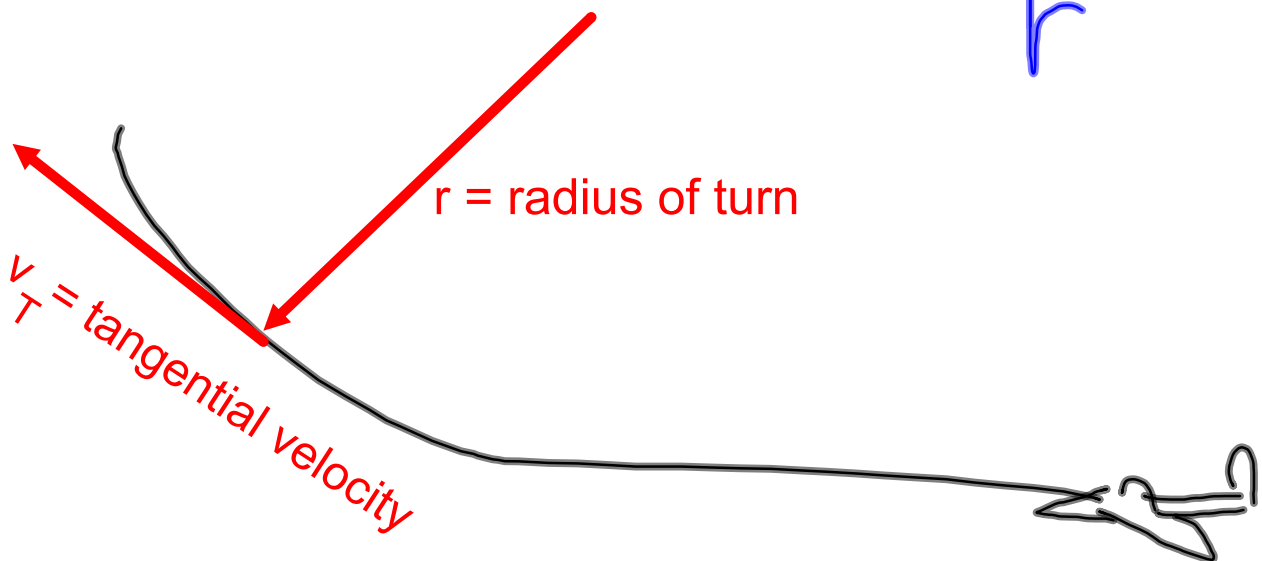
Too much centripetal force and you come in towards the center.

Too little and you leave the circle.



**The required centripetal acceleration
for circular motion**

$$a_c = \frac{v_T^2}{r}$$



**Divide the centripetal
acceleration by 10 m/s/s to get g's**