

Name _____ Date _____ Period _____

A particle travels in a circular path and point P is at the center of the circle.

(a) If the particle's linear momentum is doubled without changing the radius of the circle, how is the magnitude of its angular momentum about P affected?

Because L is directly proportional to p , L is doubled.

(b) If the radius of the circle is doubled but the speed of the particle is unchanged, how is the magnitude of its angular momentum about P affected?

Because L is directly proportional to r , L is doubled.