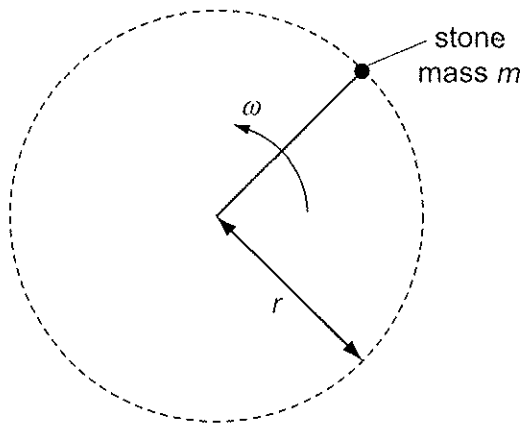


- 12 A stone of mass m is attached to a string. The stone is rotating in a vertical circle of radius r with a constant angular speed ω as shown.



The acceleration of free fall is g .

What is the variation in magnitude of the tension in the string during one revolution of the stone?

- A** zero **B** $2mg$ **C** $mr\omega^2$ **D** $2mr\omega^2$