

**12** A stone rotates in a horizontal circle with constant angular velocity  $\omega$ .

What changes occur in the linear speed and in the centripetal acceleration of the stone as the radius of the circle increases?

	linear speed	centripetal acceleration
<b>A</b>	constant	decrease
<b>B</b>	constant	increase
<b>C</b>	increase	constant
<b>D</b>	increase	increase