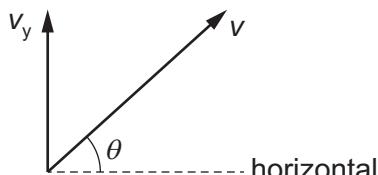


- 3 A tennis ball is hit so that it leaves the racket with velocity  $v$  at an angle  $\theta$  to the horizontal.



The vertical component of the velocity is  $v_y$ .

What is the magnitude of the horizontal component of  $v$ ?

A  $v \sin \theta$

B  $v_y \cos \theta$

C  $v_y \sin \theta$

D  $(v^2 - v_y^2)^{\frac{1}{2}}$