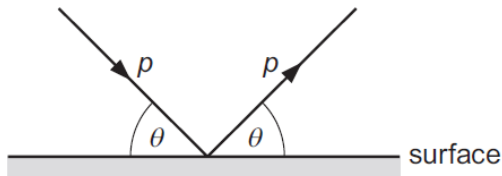


- 5 A ball strikes a horizontal surface with momentum  $p$  at an angle  $\theta$  to the surface, as shown.



The ball rebounds with the same magnitude of momentum at an angle  $\theta$  to the surface.

The ball is in contact with the surface for time  $t$ .

What is the magnitude of the average resultant force acting on the ball during the collision?

- A** zero                      **B**  $\frac{2p}{t}$                       **C**  $\frac{2p\cos\theta}{t}$                       **D**  $\frac{2p\sin\theta}{t}$