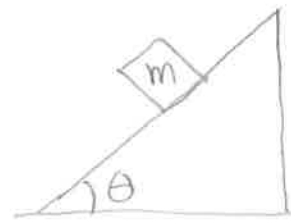


Quiz

Consider a block of mass m that lies on an inclined plane at the angle θ . The coefficient of friction between the block and plane is μ . If the block is released from rest and does not move, what are the magnitudes of the normal force and friction force on the block?

	<u>Normal</u>	<u>Friction</u>
(a)	$mg \cos \theta$	0
(b)	$mg \cos \theta$	$mg \mu \cos \theta$
(c)	$mg \sin \theta$	$mg \mu \sin \theta$
(d)	$mg \cos \theta$	$mg \sin \theta$
(e)	$mg \sin \theta$	$mg \cos \theta$



Quiz

If the same block is now pushed up the incline by a horizontal force of magnitude P , what are the normal force and friction force?

- | <u>Normal</u> | <u>Friction</u> |
|--------------------------------------|--|
| (a) $mg \cos \theta$ | $\mu mg \cos \theta$ |
| (b) $mg \cos \theta + P \cos \theta$ | $\mu (mg \cos \theta + P \cos \theta)$ |
| (c) $mg \cos \theta + P \sin \theta$ | $\mu (mg \cos \theta + P \sin \theta)$ |
| (d) $mg \cos \theta + P \cos \theta$ | $P \cos \theta - mg \sin \theta$ |
| (e) $mg \cos \theta$ | $P \sin \theta - mg \sin \theta$ |

