| In-class activities |
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| January 12, 2010 |
| Morning class results |

Distance traveled is equal to average speed multiplied by

1. distance.
2. time
3. acceleration.
4. instantaneous speed


If you drop a boulder from a tall cliff, as it falls it will gain
When a ball rolling down an inclined $4 \mathrm{~m} / \mathrm{s}$ each second, acceleration of the ball is


1. $10 \frac{\mathrm{~m}}{\mathrm{~s}}$ of speed each second.
2. more and more speed each second.
3. equal amount of equal amount of falling d
second.
4. All of the above


## A tennis ball and a bowling ball are

 simultaneously released from rest at the top of your school building. The ball to reach the ground first will be the2. bowling ball.
B. Both will hit
same time.
3. Any of the above, depending on wind conditions.


When a bird flies at $8 \mathrm{~km} / \mathrm{h}$ in an $8-\mathrm{km} / \mathrm{h}$ headwind (moving against the wind), the speed of the bird relative to the ground is

1. zero.
2. $1 \mathrm{~km} / \mathrm{h}$.
3. $8 \mathrm{~km} / \mathrm{h}$.
4. $16 \mathrm{~km} / \mathrm{h}$.
5. more than $16 \mathrm{~km} / \mathrm{h}$.


## Whenever the net force on an

 object is zero, its acceleration
## 1. May be zero

2. Is zero
3. Is constant
4. Is accelerating


Which has zero acceleration? An object

## 1. at rest

2. moving at constant velocity
3. in mechanica equilibrium
$\Rightarrow$ 4. all of the above
4. none of the above

