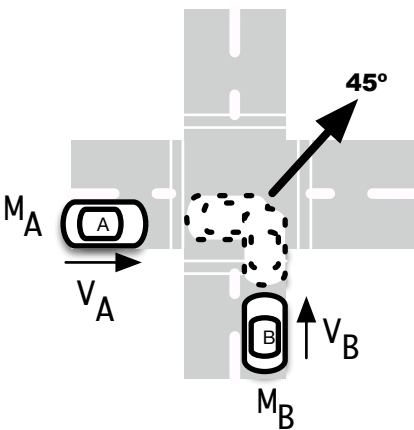


Corona Week 6: Conservation of Momentum

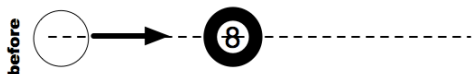
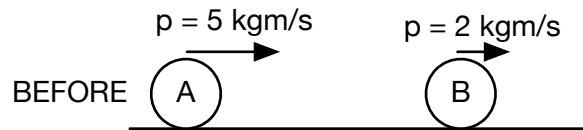
1. Momentum Concepts

FOR ALL PROBLEMS, ASSUME THERE ARE NO OUTSIDE FORCES



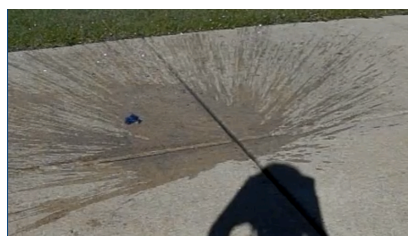
1. Make up masses and velocities for the vehicles that would cause the wreck to move at 45° .
The two vehicles must have different masses.

2. For the situation shown, make up two possible situations after the collision and two impossible situations after the collision. Make sure to label which are which



3. The cue ball (white) is hit at the 8-ball (black), which was at rest. Of the four after-situations. Which two are possible? Which two are impossible? Explain.

<p>A</p>	<p>B</p>
<p>C</p>	<p>D</p>



4. A water balloon was thrown and hit the sidewalk. Indicate with an arrow which direction the balloon must have been moving when it hit.
(The shadow is of the person filming, who did not throw the balloon.)