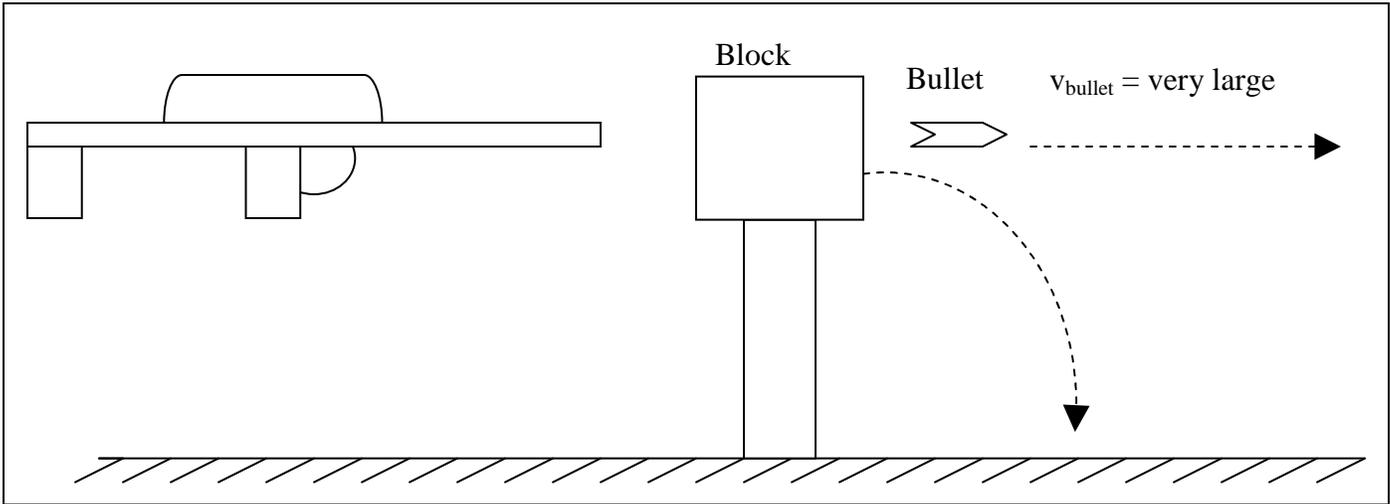
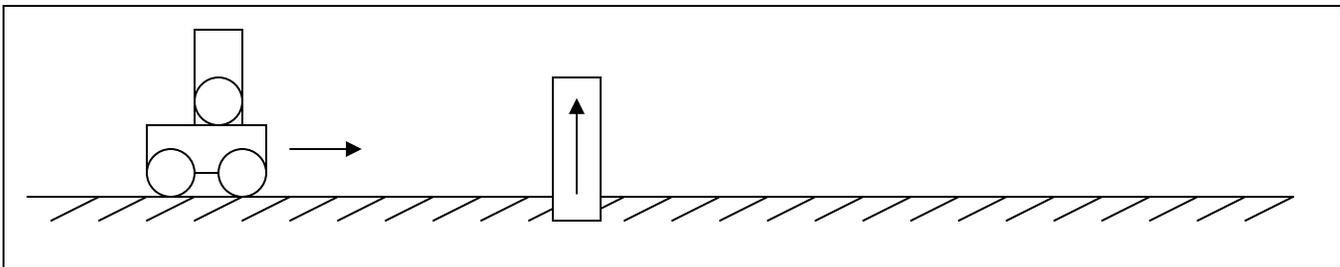


2D kinematic Demos assume absolutely no air resistance

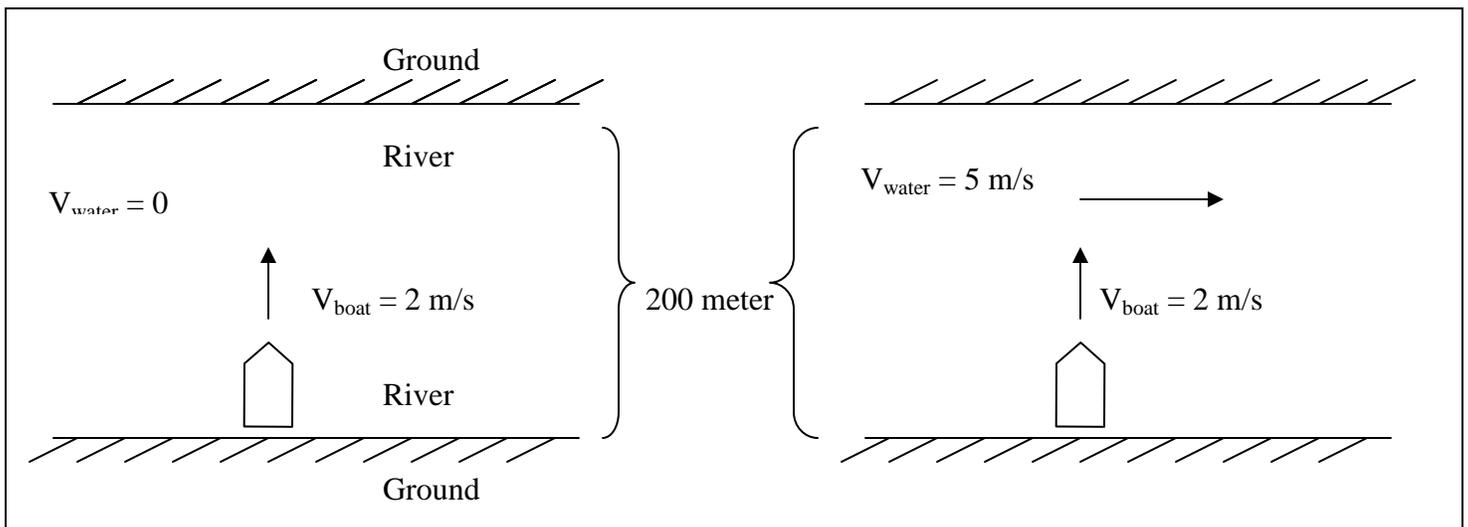
1) A large very powerful gun shoots a bullet that easily goes through a block.. In the process the block is knocked off the post and falls the ground. Which hits the ground first the bullet or the block? Why? Explain?



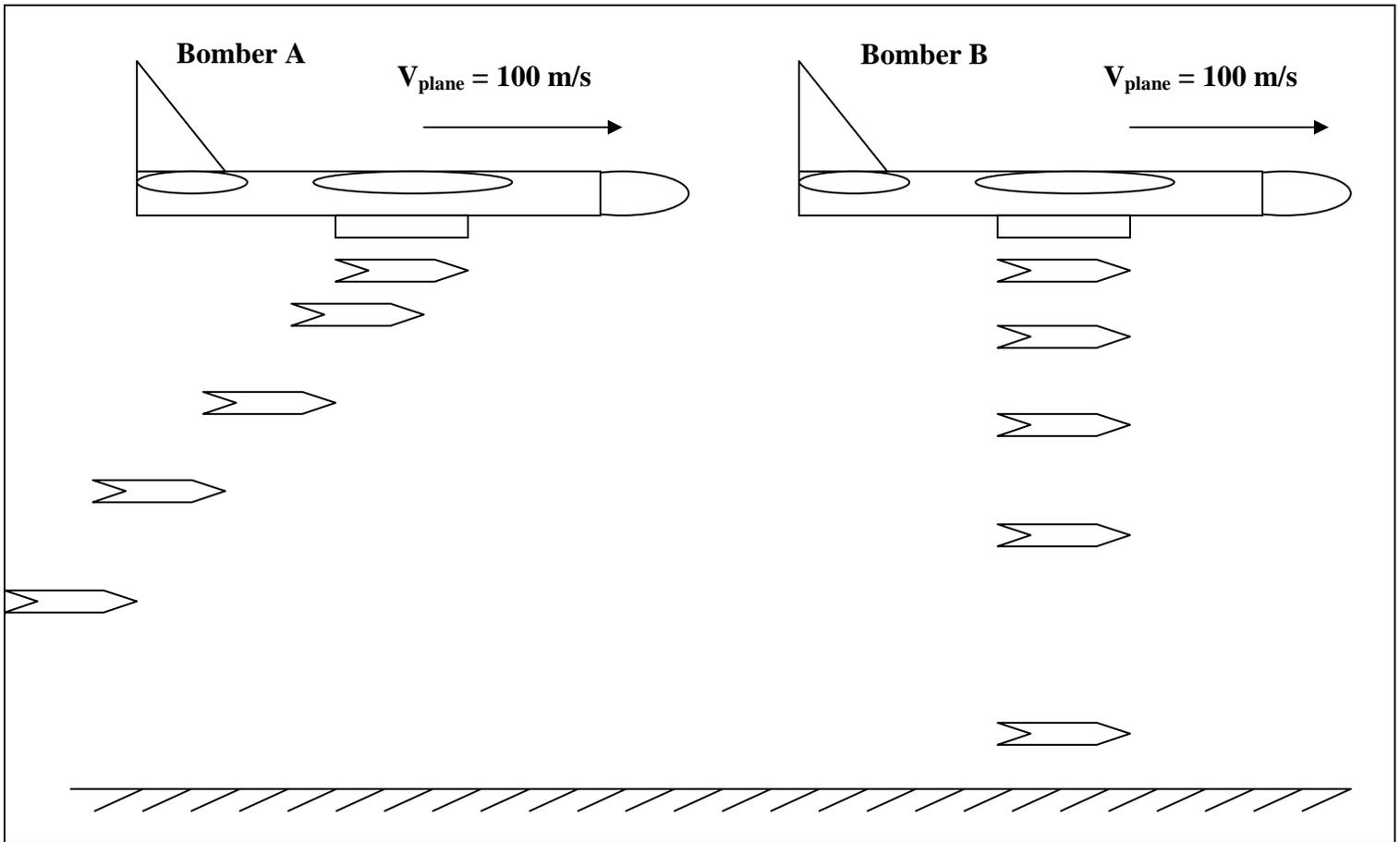
2) Pop Cart: It is a cart that rolls and has a vertical tube that shoots a small ball straight into the air when triggered. When pushed across a level track, a small vertical bar will trigger the ball to shoot into the air without slowing down the cart. Where will the ball land after it as been ejected from the cart? Why? Explain?



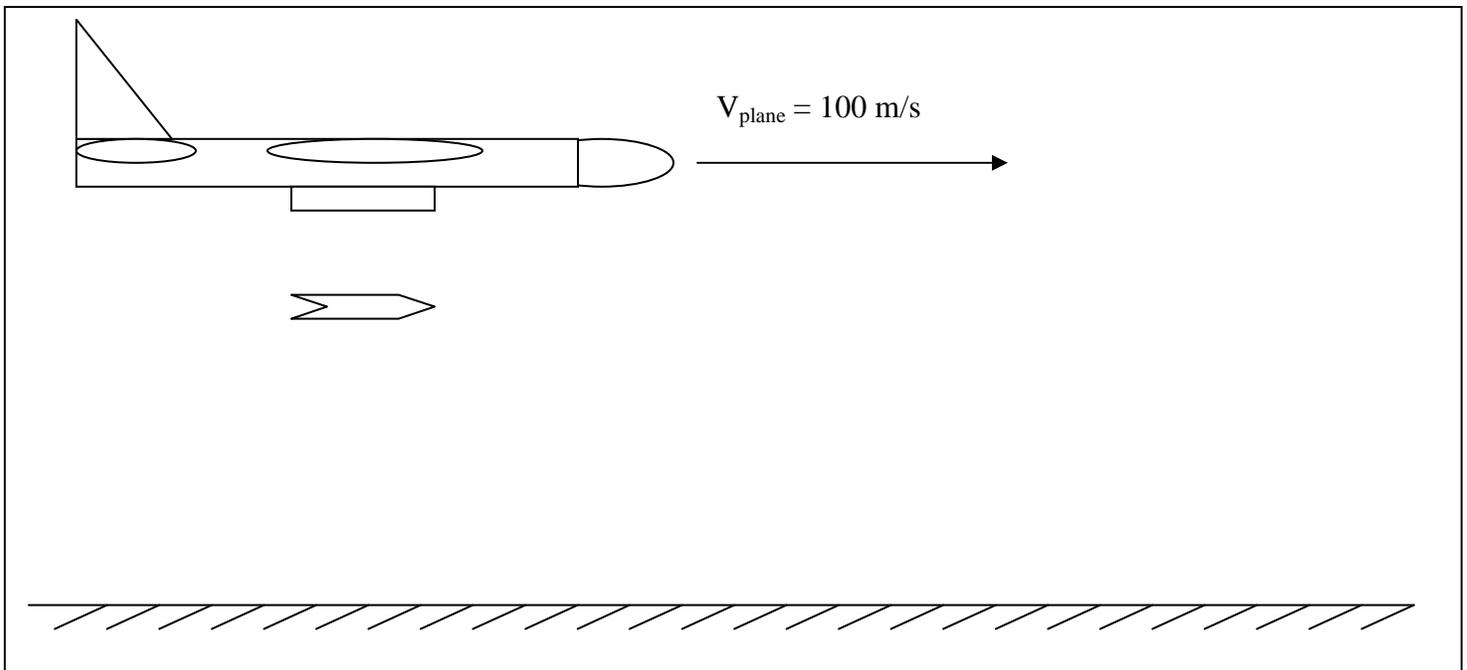
3) River crossing: How long does it take to get across river? Why? Explain?



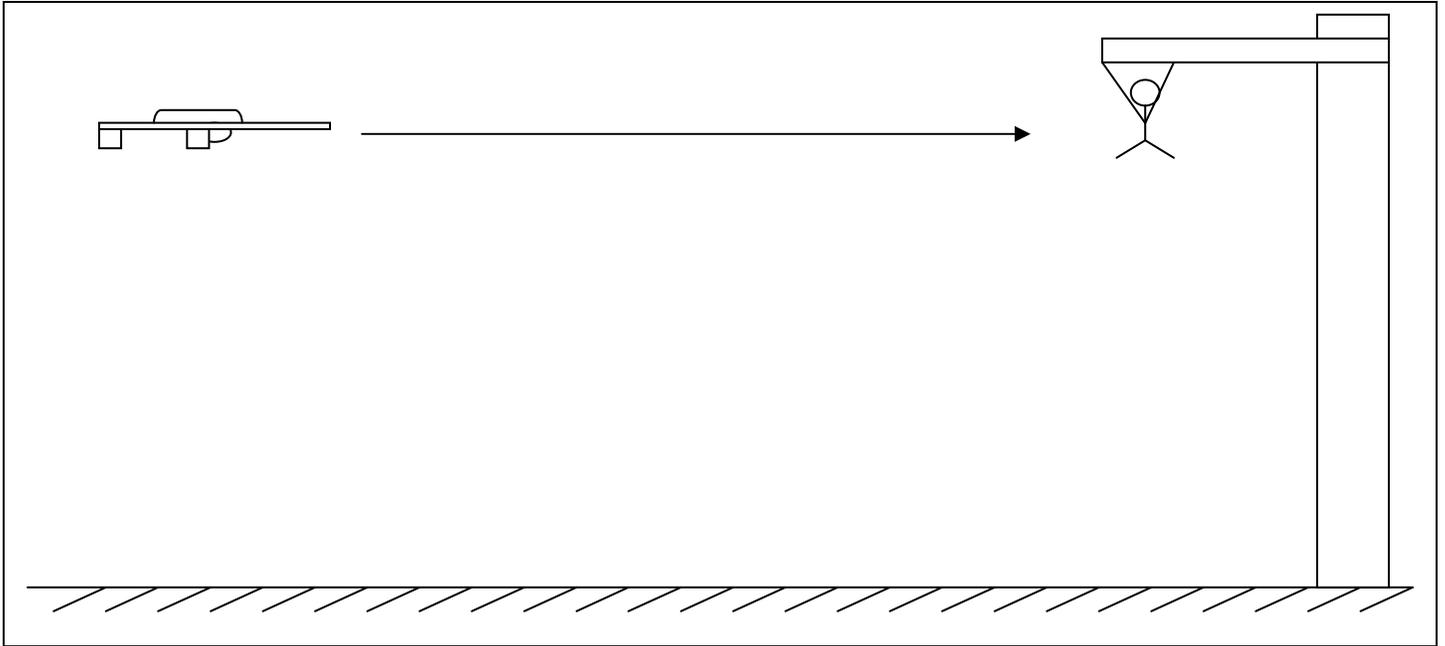
4) Which picture of the bombers dropping their bombs is correct? Why? Explain?



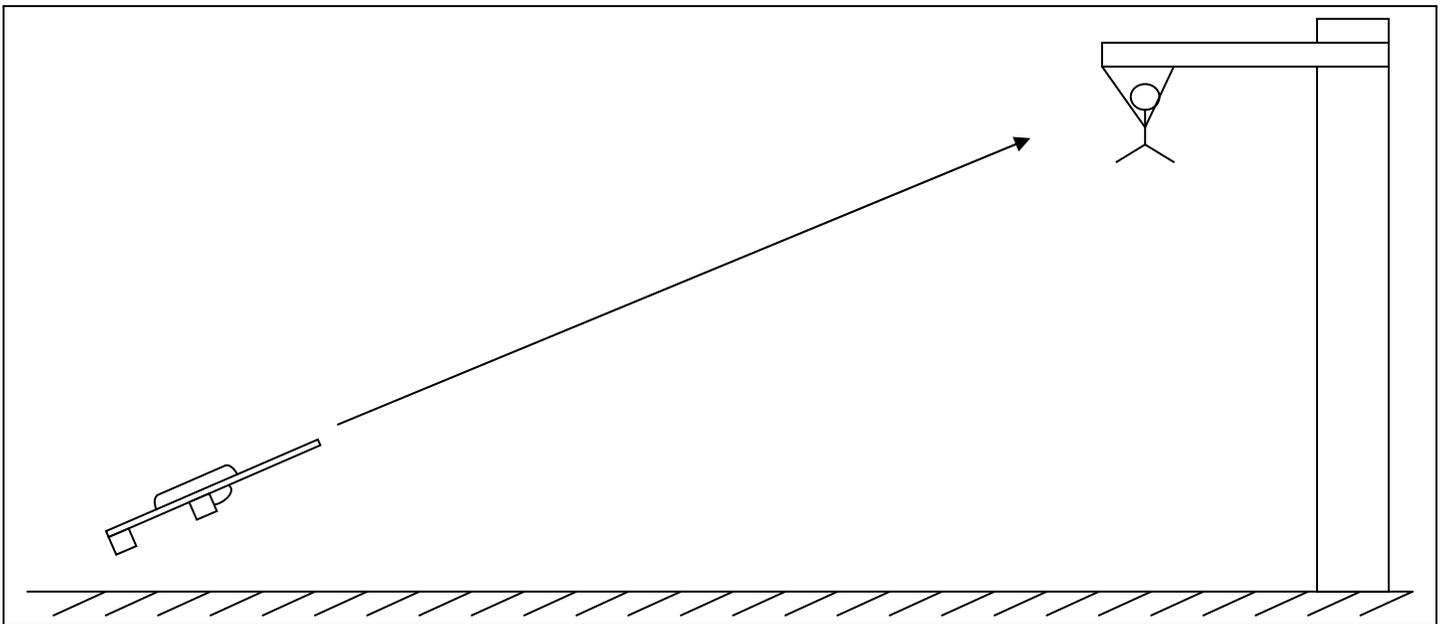
5) When the bomb hits the ground where will the bomber be? Why? Explain?



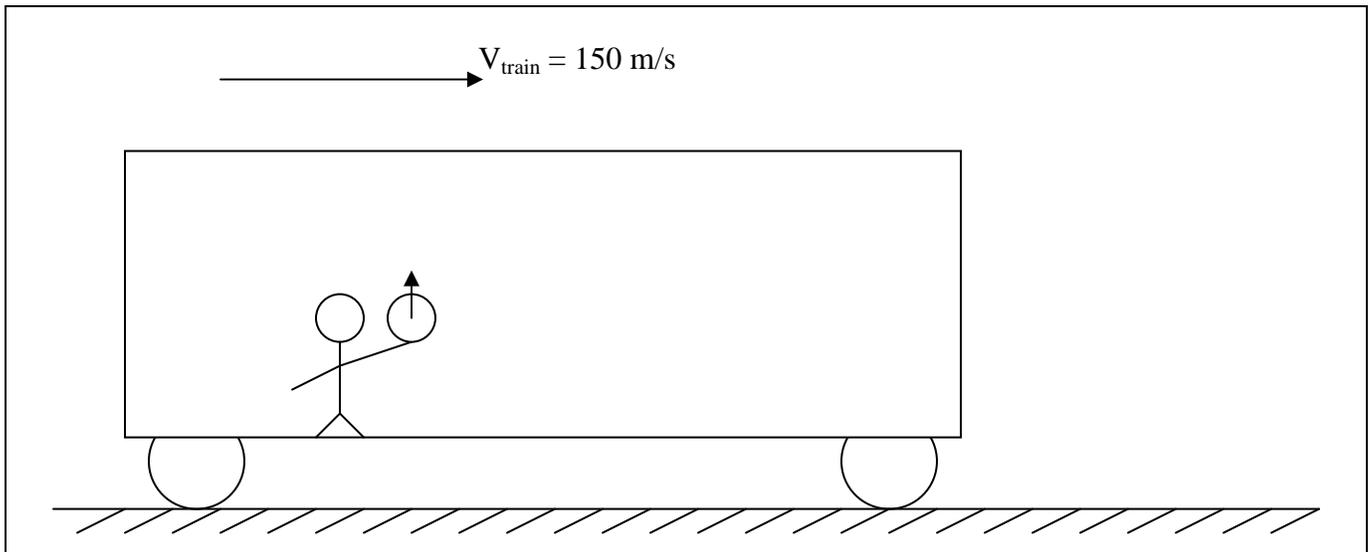
6) Monkey hunter: Should the monkey hold on or drop from the tree to escape the hunter? Why? Explain?



7) Monkey hunter: Should the monkey hold on or drop from the tree to escape the hunter? Why? Explain?



8) The Train is moving at a constant speed of 150 m/s (336 mph) how does a ball behave when it is tossed into the air? Why? Explain?



9) Could Rocket B slow down or speed up Rocket A? Why? Explain?

