

You throw a ball straight up into the air at a velocity of 15 m/s. You want to know how high above your hand the ball will be at exactly 2.5 sec after you released it.

You must **SHOW ALL WORK** to receive credit!!!

1. Of the 5 motion variables - V_i , V_f , a , ΔX , and T , identify which one you are solving for and the magnitudes and directions of all of the others that are known:
2. Which of the motion equations is best to use to determine the height of the ball?
3. How high is the ball above your hand at 2.5 sec after you throw it?
4. (Advanced) Is the ball still on its way up, or is it coming down? How do you know?