

# 2-D motion Introduction

Note Title

9/9/2011

FOR ALL OF THESE EXAMPLES! NO AIR FRICTION



1 second



2 seconds



3 seconds



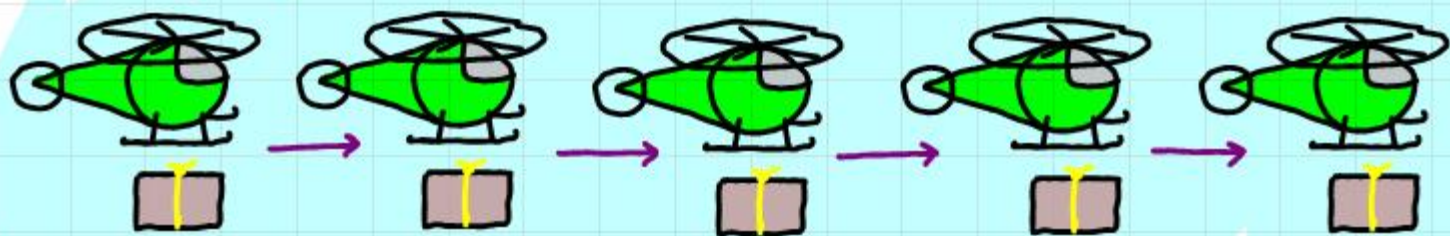
4 seconds



If a hovering helicopter dropped a box. It would be very easy to find its position every second.

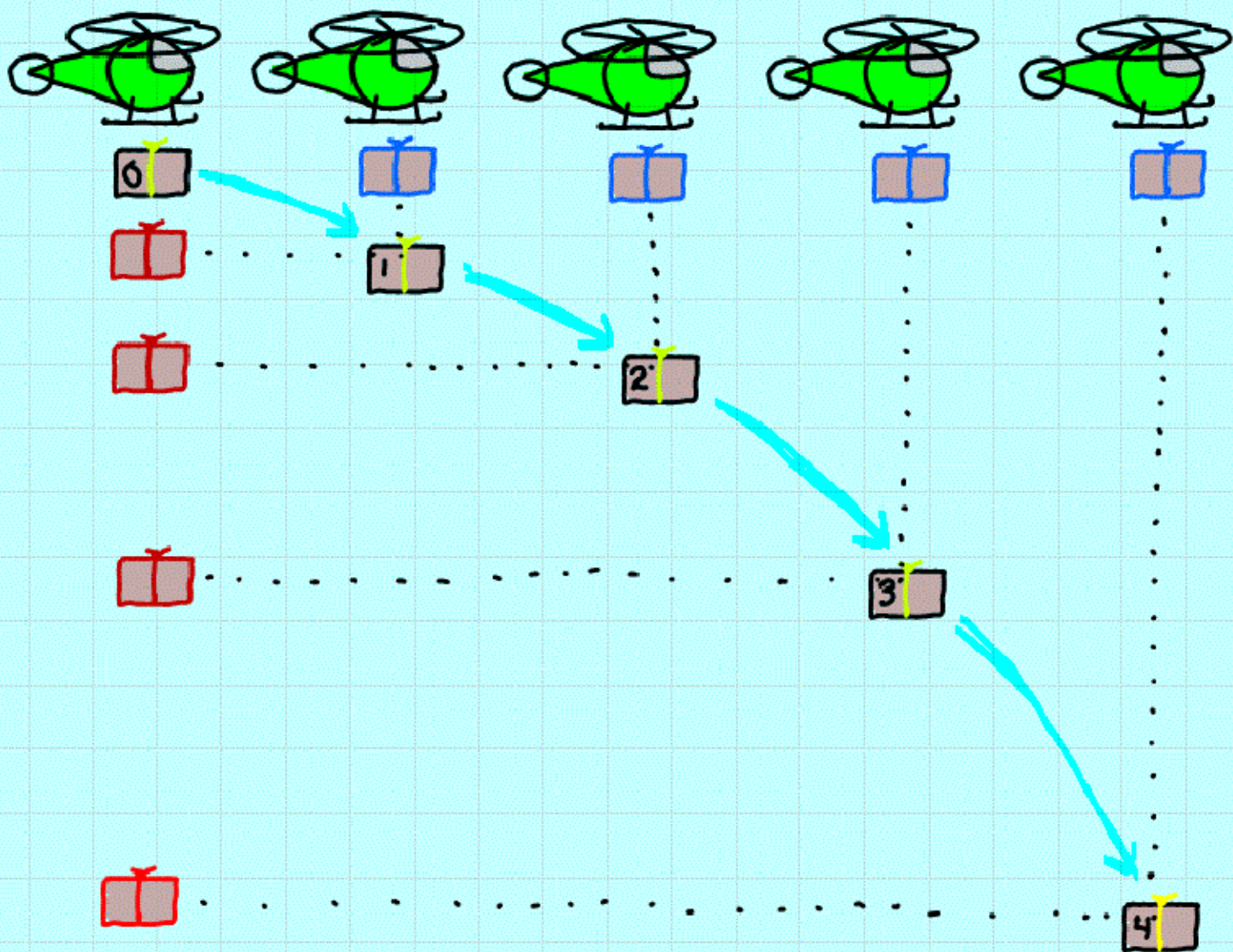
but what if our helicopter was moving at a constant speed?

TO SIMPLIFY, LET'S TURN GRAVITY OFF



Without gravity to separate the two objects, they remain together while still moving →

**WHAT HAPPENS WHEN GRAVITY IS TURNED BACK ON?**



If we treat each part as a vector  
we can add them and get our result.