

X-Y Independence Video Notes

If we could shoot a ball sideways, and drop another ball at exactly the same time, which do you think would hit the ground first? _____

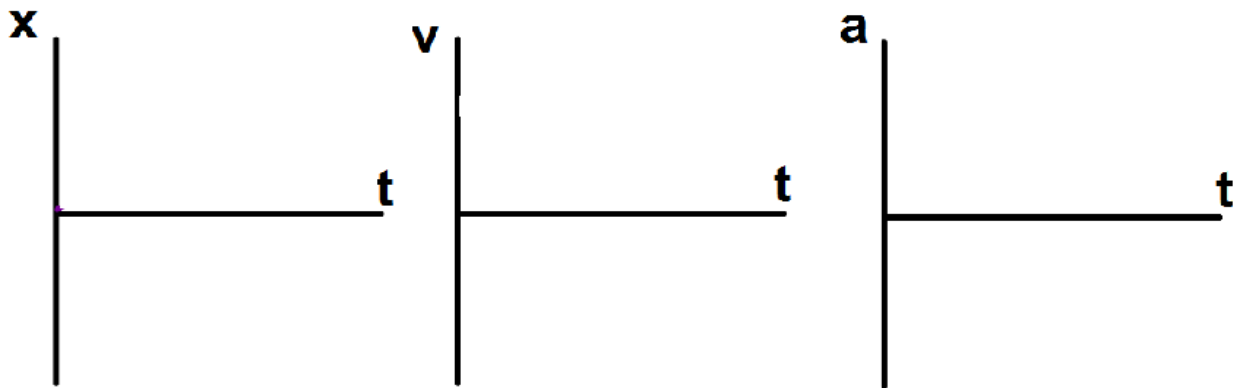
What actually happened in the slow motion video? _____

This happened because the x and y dimensions _____ .

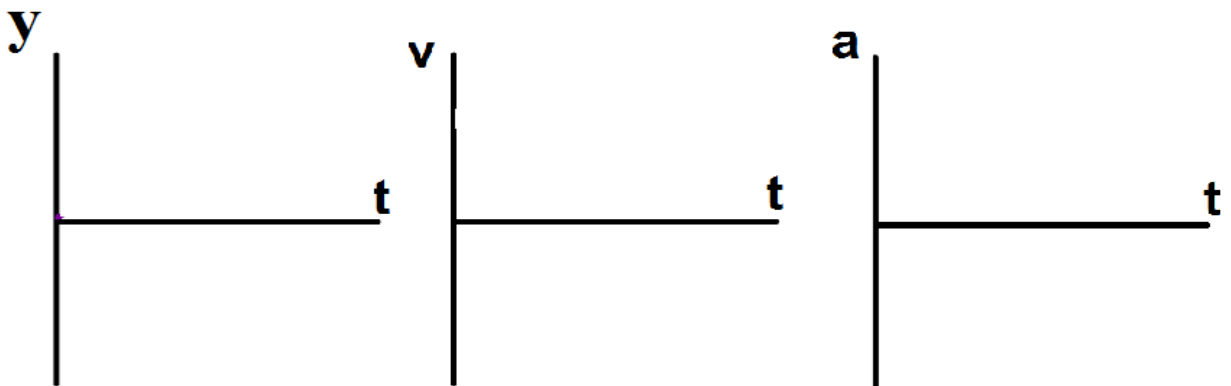
The fact that the shot ball is also moving in the x direction, has _____ on the freefall in the y direction.

My graphs of the shot ball look like this:

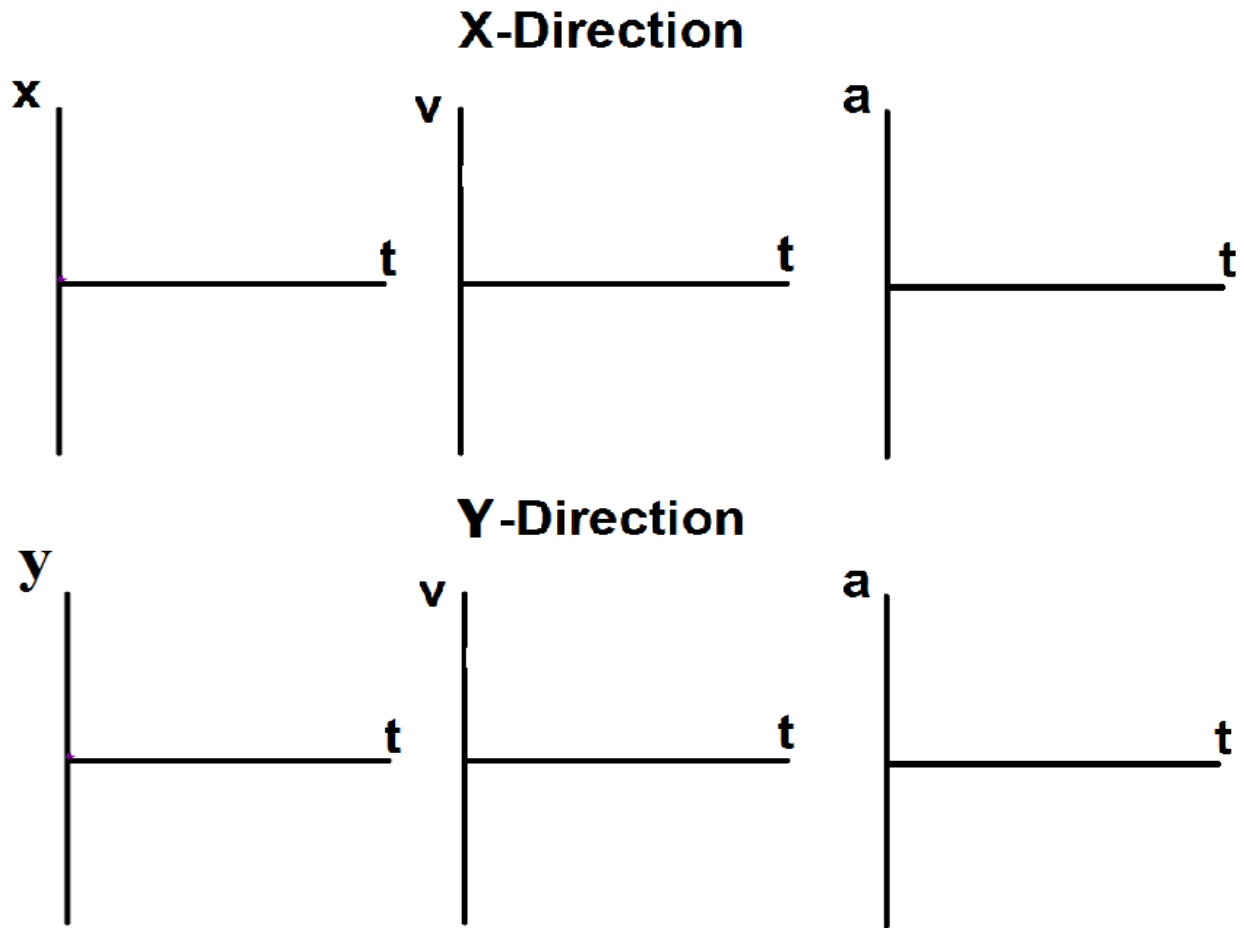
X-Direction



Y-Direction



The correctly drawn graphs of the shot ball look like this:



This also works for bullets. How did the mythbusters prove this?

What happened in the Japanese video? Why did that happen?