

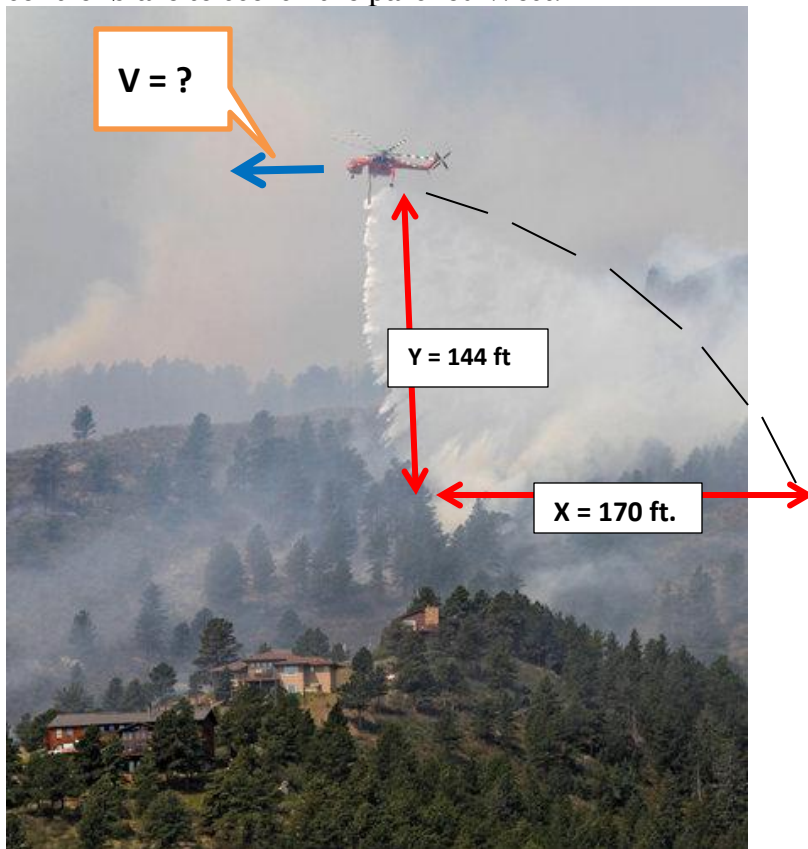
# PROJECTILES:

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## Wildfires Engulf Forests and Homes in the West

DENVER — A fast-growing wildfire raged through dry forests and hillside subdivisions in northern Colorado on Monday, charring homes and forcing hundreds of families to evacuate in the latest out-of-control blaze to scorch the parched West.



Aircraft and firefighters struggled to control flames that charred almost 60 square miles in Colorado.

The fire was probably sparked by a lightning strike on Saturday, officials said, and it quickly exploded in size. By Monday, it had burned across nearly 60 square miles in the mountains about 15 miles west of Fort Collins, a college town, destroying more than 100 structures and spewing thick columns of smoke visible from miles away.

The remains of a 62-year-old Larimer County woman who had been reported missing were found Monday, The Associated Press reported. In south central New Mexico, hundreds of people were forced to flee an uncontrolled 54-square-mile fire near Ruidoso as it engulfed home after home. In Gila National Forest in southwestern New Mexico, fire crews were still battling the largest blaze in the state's history, but officials reported that after burning for nearly a month across 434 square miles, the fire was 37 percent contained.

**INTRODUCTION:** This fire bombing Helicopter is dropping water as seen in the picture at left. The Horizontal and vertical position of water dumped on fire can be seen in the picture at left.

**QUESTION:** Find the horizontal speed (in ft/s and mph) of helicopter using projectile concepts?

**HINTS:** Break solution process into Two sections: Horizontal motion and Vertical motion.  
 $g = 32 \text{ ft/s}^2$  ,  $88 \text{ ft/s} = 60 \text{ mph}$

**ANSWER:**  $\sim 56.67 \text{ ft/s}$  or  
 $\sim 38.6 \text{ mph}$