

**Problem:**

A blue plane flies across the country at a constant rate of 400 miles per hour. Write an equation and sketch a graph to show the relationship between distance and hours traveled for the blue plane.

**Solution:**

Well-known equation, which shows relationship between speed, distance and time (it follows from the definition of speed):

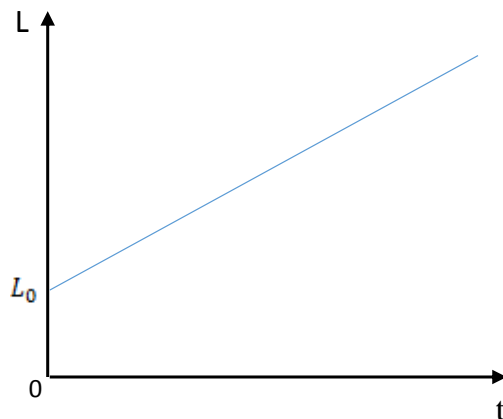
$$L = vt$$

Where  $L$  – distance travelled;

$v$  – speed of the plane;

$t$  – time of travel;

According to the equation above, we can sketch a graph to show the relationship between distance and hours traveled for the blue plane (this dependence is linear):



Where  $L_0$  – initial coordinate (position) of the plane.

**Answer:**  $L = vt$