

The flight of a paper airplane follows the quadratic equation  $H(x) = -(x-3)^2 + 25$ , where  $H(x)$  represents the height of the paper airplane in feet and  $x$  is the horizontal distance in feet the airplane travels after it is thrown.

What is the starting height of the paper airplane?

What is the vertex? Explain the meaning of the vertex in the context of the problem.

How far the paper airplane fly horizontally?

Graph the flight of the paper airplane.

