

Applications

Set 6-6a

An object is thrown from the ground at a speed of 48 ft/sec, and is described by the function $h(t) = -16t^2 + 48t$, where t is time, in seconds and h is height, in feet.

- 1) *Graph this function.*
- 2) *What is the vertex and what does it mean?*
- 3) *What are the x-intercepts and what do they mean?*
- 4) *How high is the object after one second?*
- 5) *How long is the object in the air?*