**Exploring Acceleration with an Android Activity Assessment**

# Describe the relationship between acceleration and velocity.

1. Given the equation for the velocity of an object representing projectile motion: $v\left(t\right)= -32t+40 $find an equation that can be used to model the object’s acceleration.

# Activity Extensions

Discuss the relationships of projectile motion for an object’s position, velocity, and acceleration and answer the questions below.

1. Given the equation for the velocity of an object simulating projectile motion: $v\left(t\right)= -32t+20 , $find an equation that can be used to model the object’s position.
2. Given the position equation for an object representing projectile motion, $h\left(t\right)= -16t^{2}+65t+40$ find equations that can be used to model the object’s velocity and acceleration.