Chapter 4: Projectile Motion
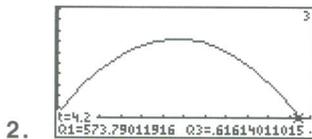
1a.

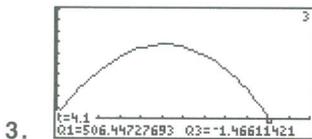**1b.** $y = -4.58x^2 + 3.60x + .31$

1c.
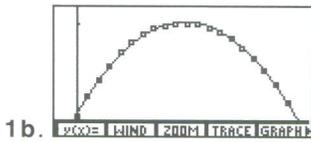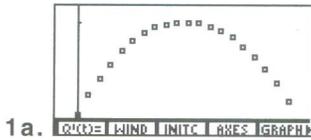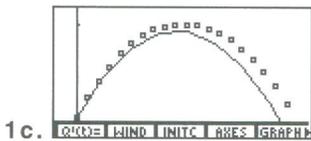
Changing the differential equation to
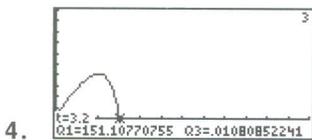
$$\frac{d^2 y}{dt^2} = 9.16$$

produces a better fit since $^-9.16$ is twice the coefficient of x^2 in the equation found in **1b**.

2.   About 574 feet

3.   Slightly less than 506 feet

4.   About 151 feet