**6.1 Projectile Motion**

1. Answers are:

a. horizontal and vertical distance

b. horizontal speed

c. *d*x *= v*x*t; dy = 4.9t2*

d. 6.4 m/sec

2. Answers are:

a. horizontal speed, time

b. vertical distance, horizontal distance c. *dy = 4.9t2; dx = vxt*

d. height = 44.1 meters, horizontal distance = 30 meters

3. Answers are:

a. vertical distance

b. time

c. *dy = 4.9t*2

d. 1.4 seconds

4. Answers are:

a. horizontal and vertical distance

b. horizontal speed

c. *d*x *= v*x*t; dy = 4.9t2*

d. 59 m/sec

5. Answers are:

a. horizontal speed, time

b. vertical distance c. *dy = 4.9t2*

d. 2.8 meters

6. Answers are:

a. horizontal speed, vertical distance

b. time

c. *dy = 4.9t2*

d. 0.45 seconds