Lesson 6 Worksheet

1. A base ball is thrown with an initial speed of 20 m/s at an angle of 10° above the horizontal. Determine:
a. How long it is in the air for.
b. What its maximum height will be.
c. How long the range (horizontal displacement) is.

2. An artillery shell is launched at an unknown angle. It strikes the ground (at the height that it was fired) 250 m away and has a maximum height of 100 m. Determine:
a. The time the shell is in the air.
b. The horizontal velocity.
c. The initial vertical velocity.
d. The initial speed.
e. The angle the projectile was launched at.
f. What is the velocity 2.00 seconds after launch?
g. What is the velocity on impact?