

NAME \_\_\_\_\_

PERIOD \_\_\_\_\_

**PHYSICS HOMEWORK QUIZ #5 D**

**PROJECTILE MOTION**

1. A motor cycle is moving up a jump ramp with a speed of 44.0 m/sec when it leaves the end of the ramp and flies through the air and then land on the level ground some distance from the end of the ramp. The ramp is 15.0 meters long and 5.0 meters high.

a. What **angle** does the ramp make with the horizontal? [3 pts]

b. What will be the **velocity** of this motor cycle when it reaches the highest point of its trajectory?  
[3 pts]

c. How **long** will it take for this motor cycle to reach the highest point of its trajectory?

d. How **high** above the ground will this motor cycle be at its highest point?[3 pts]

e. How **far** is the end of the ramp will the motor cycle reach the ground? [3 pts]