
PHYS 1110 Worksheet: Potential Energy

1. An egg is released from rest from the roof of a building and falls to the ground. Its fall is observed by a student on the roof of the building, who uses coordinates with origin at the roof, and by a student on the ground, who uses coordinates with origin at the ground.

What values do the students assign to:

- a. The initial gravitational potential energy U_{grav} ?
- b. The final gravitational potential energy U_{grav} ?
- c. The change in gravitational potential energy ΔU_{grav} ?
- d. The kinetic energy K of the egg just before it lands?