

King Fahd University of Petroleum and Minerals  
Department of Physics

Name:  
ID#:

PHYS 205 prelab Quiz-09/09/2020  
**Due time 12:30 pm**

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Show detailed solution using **your hand writing only on white paper**, typing or printing will not be accepted. Then, take clear image of your answer and then send it to my email

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Q: Example: a stone is thrown vertically straight up from ground with initial speed  $v_0 = 4.00 \pm 0.200$  m/s. After a time  $t = 0.600 \pm 0.0600$  s the height reached is 0.636 m. Calculate the uncertainty of height? Assume  $g = 9.80$  m/s<sup>2</sup> (no uncertainty in  $g$ ).

Formulas that might be needed to solve:

$$v_f = v_0 - gt$$

$$v_f^2 = v_0^2 - 2g(y_f - y_0)$$

$$y_f - y_0 = v_0 t - (1/2)gt^2$$