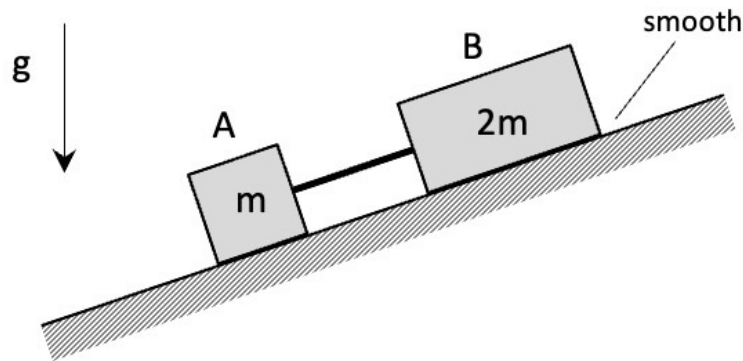


## ME 274 – Spring 2024 – 1:30 – Quiz 5



Q1. Energy for block A alone is conserved (HINT: consider FBD of A alone):

a) TRUE

*rigid rod carries no load*

b) FALSE

Q2. Energy for block B alone is conserved (HINT: consider FBD of B alone):

a) TRUE

*rigid rod carries no load*

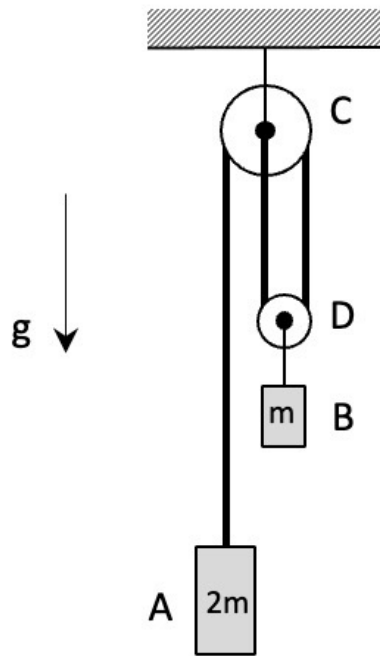
b) FALSE

Q3. Energy for blocks A and B together is conserved (HINT: consider FBD of A and B together):

a) TRUE

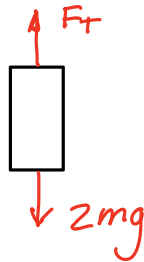
*regardless of load in rod, the load is internal for A+B*

b) FALSE



Q4. Energy for block A alone is conserved (HINT: consider FBD of A alone):

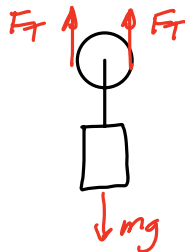
- a) TRUE
- b) FALSE



*F<sub>T</sub> does work on A*

Q5. Energy for block B alone is conserved (HINT: consider FBD of B alone):

- a) TRUE
- b) FALSE



*F<sub>T</sub> does work on B*

Q6. Energy for blocks A and B together is conserved (HINT: consider FBD of A and B together):

- a) TRUE
- b) FALSE

*Tension is an internal force, no work on A+B*