

## ENDS 231: Practice Quiz 2

*Note: A one page (one sided) crib sheet is allowed during the quiz, along with a silent, **non-programmable** calculator.*

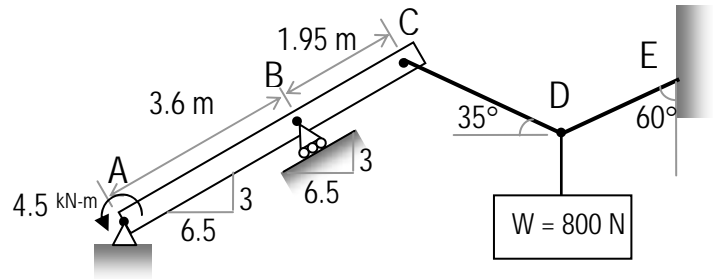
Clearly show your work and answer.

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The structure shown is supporting a cable system with a force due to a mass. (NOTE: The support configuration for the rigid body can and will be changed for the quiz!)

Using clear free body diagrams, determine:

- the forces in cables CD and DE.
- the support reactions (*size and direction*).
- [some short question from the text material]



Answers – Not provided on actual quiz!

- CD = 764.3 N, DE = 723.1 N
- $A_x = -723.2$  N  $A_y = 648.9$  N, B = -231.9 N (*down and to the right*)

**Disclaimer: Answers have NOT been painstakingly researched.**