

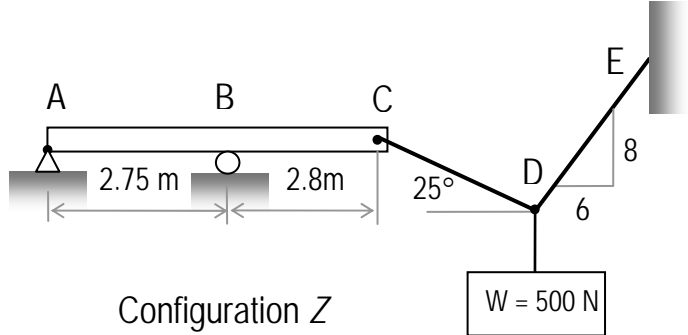
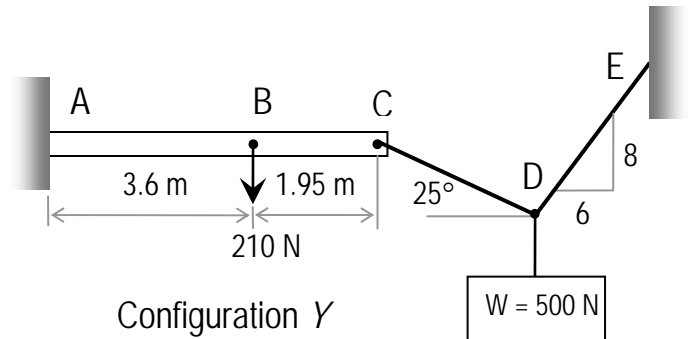
ENDS 231: Practice Quiz 2

Clearly show your work and answer.

The beam shown is supporting a cable system with a force due to a mass. There designer anticipates using one of the two support configurations shown for the beam.

For configuration X determine:

- the forces in cables CD and DE.
- the support reactions for the beam.
- [some short question from the text material]*



Answers:

- CD = 306.6 N, DE = 463.1 N
- $[A_x = 277.9 \text{ N } (\leftarrow), A_y = 339.6 \text{ N } (\uparrow), M_{RA} = 1475.1 \text{ Nm (ccw)}$
 $[A_x = 277.9 \text{ N } (\leftarrow), A_y = 131.9 \text{ N } (\downarrow), B = 261.5 \text{ N } (\uparrow)]$

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