



A ladder is leaning against a smooth wall. There is a friction between the ladder and floor, which holds the ladder in place.

Determine torques about the pivot point P.

- A) counterclockwise, $F L \sin \theta$; clockwise, $W \frac{L}{2} \cos \theta$.
- B) counterclockwise, $F L \cos \theta$; clockwise, $W \frac{L}{2} \cos \theta$.
- C) counterclockwise, $F L \sin \theta$; clockwise, $W \frac{L}{2} \sin \theta$.
- D) counterclockwise, $F L \cos \theta$; clockwise, $W \frac{L}{2} \sin \theta$.

By inspection,

Answer **A**.

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