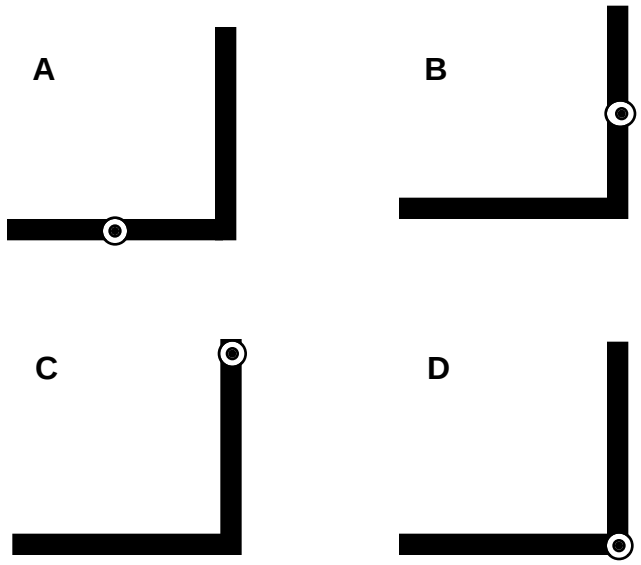
Four L's Rotating About an Axis (side view)—Moment of Inertia[84]

Below are four identical figure **L**'s, which are constructed from two rods of equal lengths and masses. For each figure, a different axis of rotation is indicated by the small circle with the dot inside, which indicates an axis that is perpendicular to the plane of the **L's**. The axis of rotation is located either at the center or one end of a rod for each figure.



Rank these **L** figures according to their moments of inertia about the indicated axes, from largest to smallest. Ignore the width of each rod but not the length.

Largest 1 _____ 2 _____ 3 _____ 4 _____ Smallest

Or, all these **L** systems have the same moment of inertia. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed				Sure					Very Sure
1	2	3	4	5	6	7	8	9	10

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