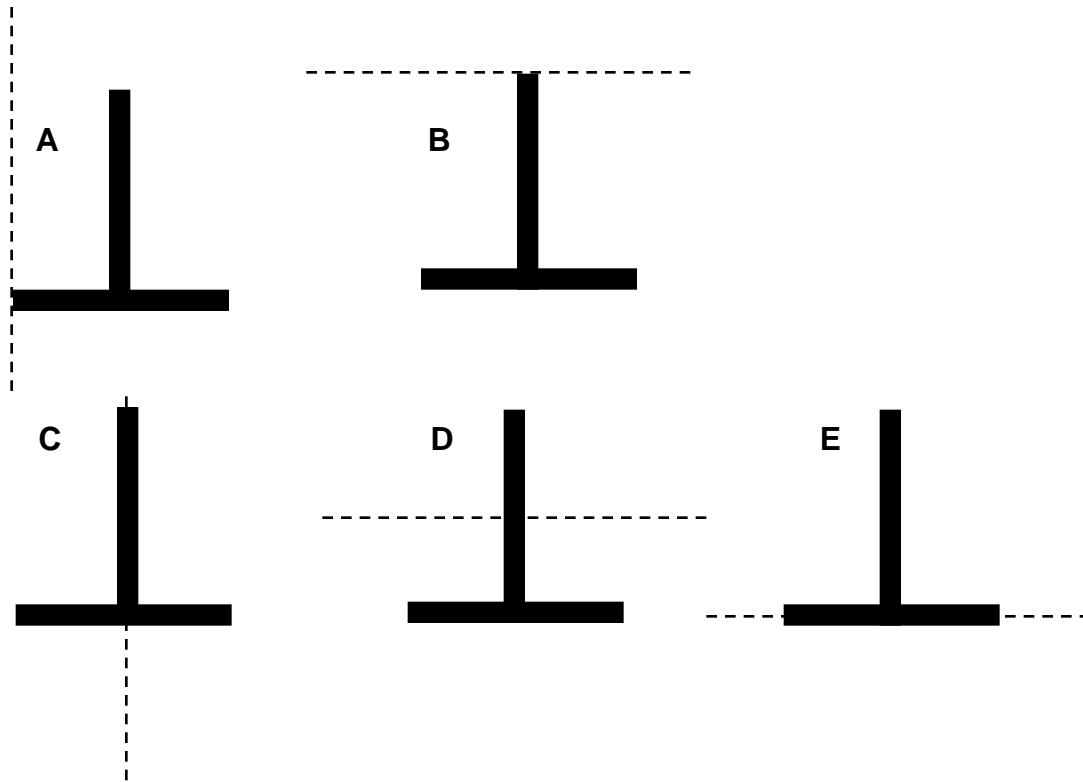


Five T's Rotating About an Axis (top view)—Moment of Inertia ⁸⁵

Below are five identical figure **T**'s, which are constructed from two rods of equal lengths and masses. For each figure, a different axis of rotation in the plane of the paper is indicated by the dotted line. The axis of rotation is located either at the center or one end of a rod for each figure.



Rank these **T** 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 _____ 5 _____ Smallest

Or, all these **T** 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		

⁸⁵ C. Hieggelke