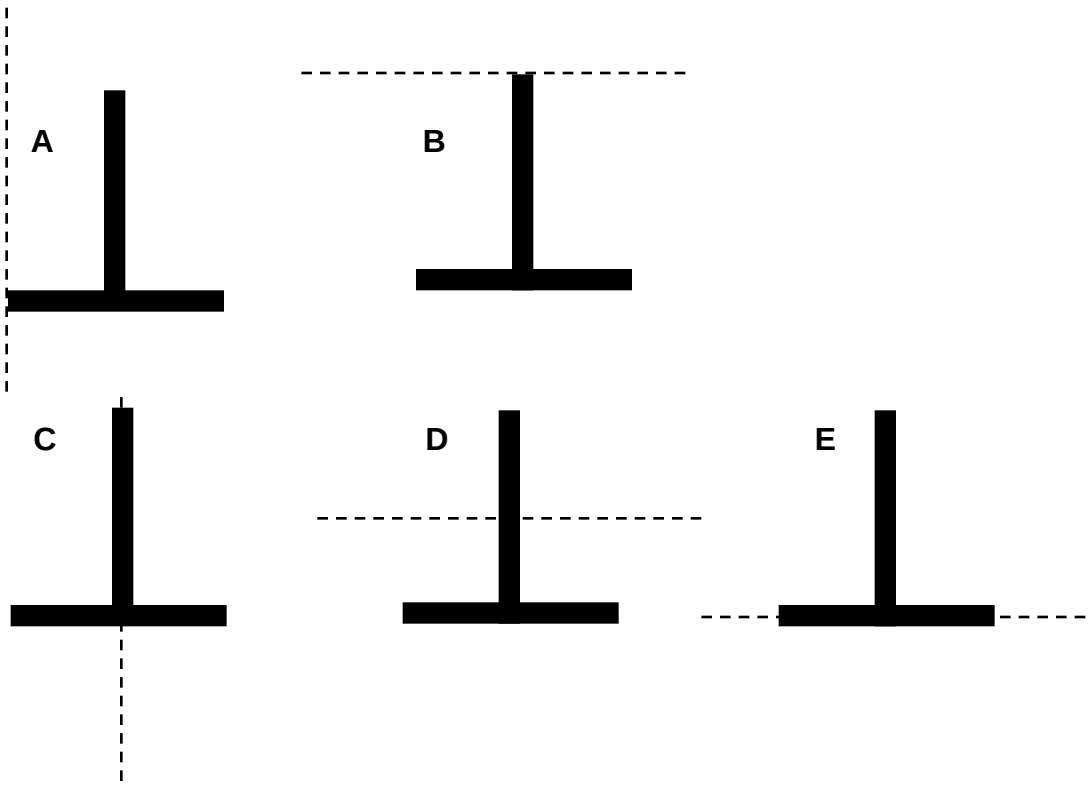
Five T's Rotating About an Axis (top view)—Angular Acceleration[88]

Shown below (in a top view with the gravitation force into the page ⊕) 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, which is in the plane of the page, is indicated by the dotted line. The axes are either at the center or one end of a rod.



Rank these **T** figures according to the magnitude of the initial angular acceleration 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 initial angular acceleration. _____

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

[88] C. Hieggelke