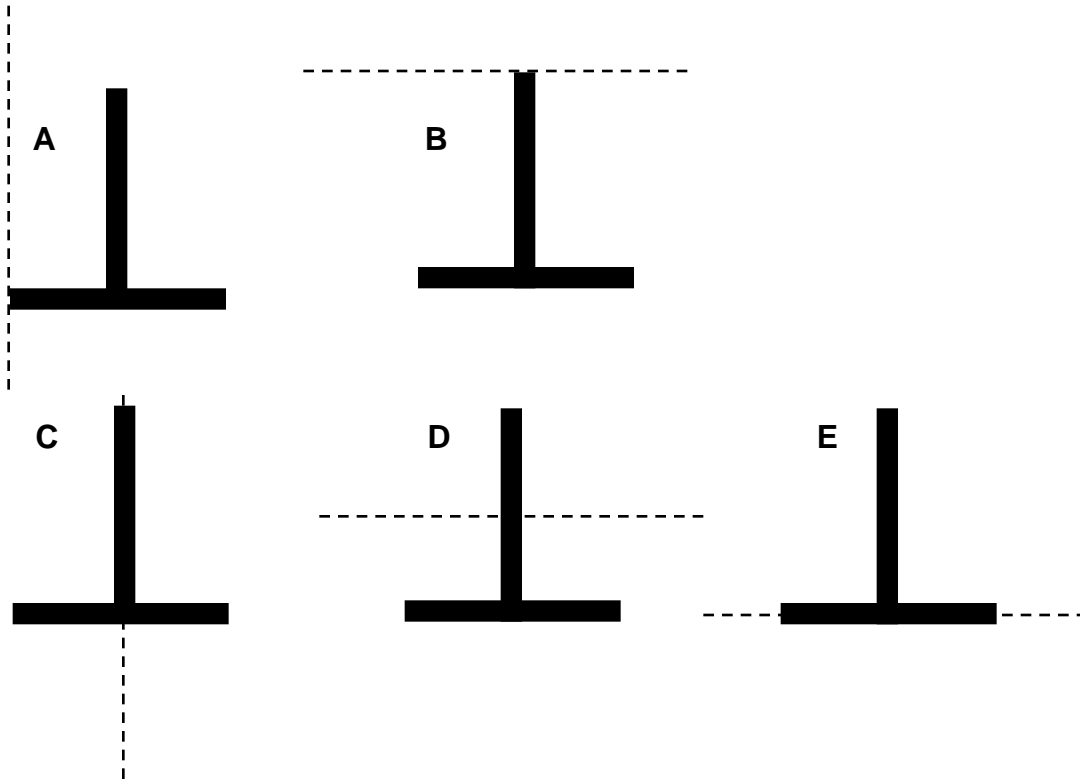


## Five T's Rotating About an Axis (top view)—Net Gravitational Torque<sup>87</sup>

Shown below (in a top view with the gravitation force into the page  $\otimes$  ) 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 magnitudes of the net torque about the indicated axes, from largest to smallest.

Largest    1 \_\_\_\_\_    2 \_\_\_\_\_    3 \_\_\_\_\_    4 \_\_\_\_\_    5 \_\_\_\_\_    Smallest

Or, all these **T** systems have the same magnitude of the net torque. \_\_\_\_\_

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		

<sup>87</sup> C. Hieggelke