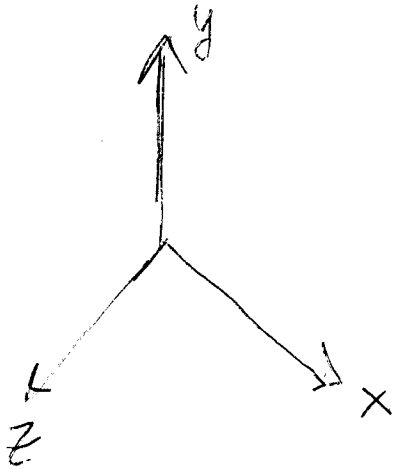
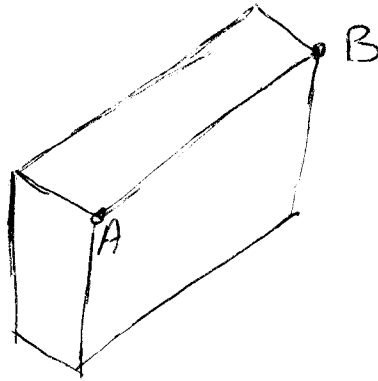


Solutions to Problem Set #1, 24-261, Fall 2001

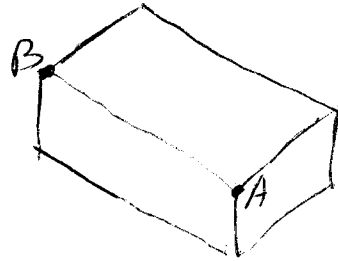


1. Body 1 rotated 90°
about negative x-axis



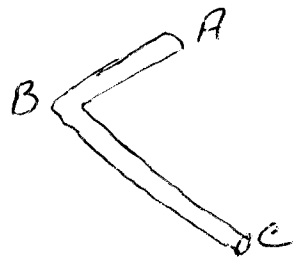
C is in
near corner

Body 1 rotated 90°
about positive z-axis

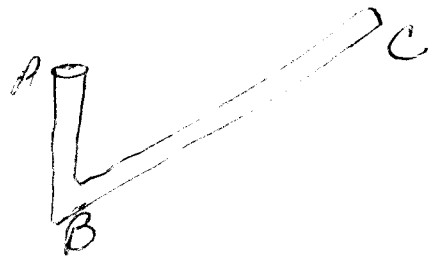


C is in
near
corner

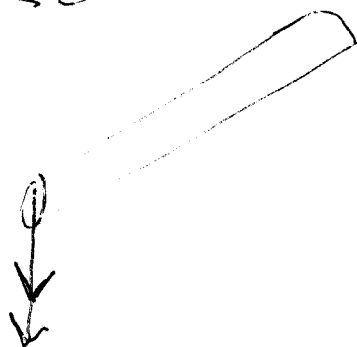
2. Body 2 rotated by 90°
about negative y-axis



Body 2 rotated by 90°
about negative z-axis



3. Body 1 has been rotated (by 90°) about the negative y -axis
4. Body 2 has been rotated (by 180°) about either the positive x -axis or the negative x -axis
5. A force $F_x < 0$ is applied.
- To maintain equilibrium the hand must apply a moment $M_y < 0$



6.

Balancing moments
 $M_x > 0$ and $M_z < 0$
must be applied by
hand to maintain
equilibrium

