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

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

Body 1 rotated 90° about positive z-axis

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

Body 2 rotated by 90° about negative z-axis

C is in near corner

C is in near corner
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 $M_y < 0$
   must be applied by hand to maintain equilibrium.