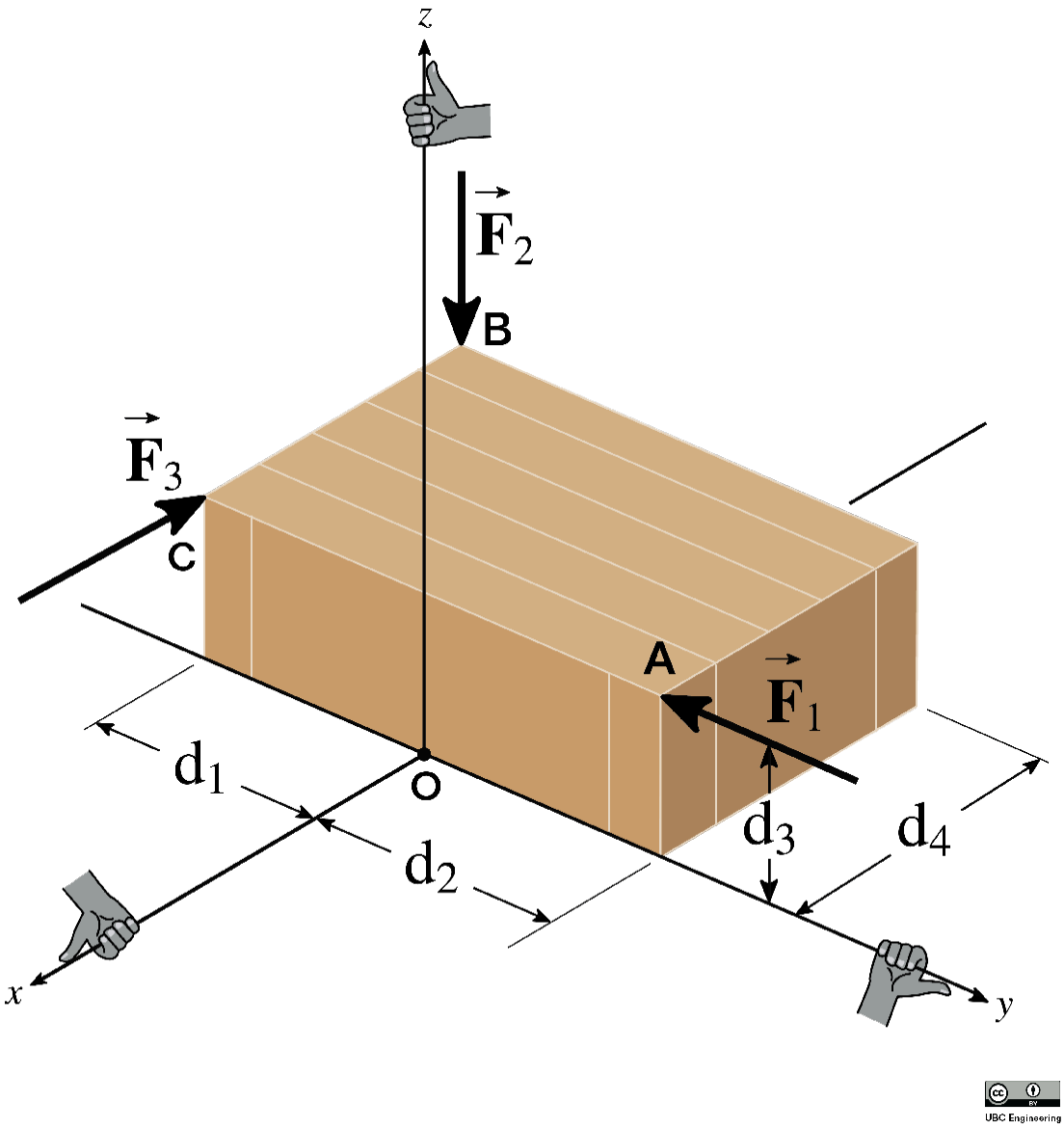

A wooden block experiences three forces $\vec{F}_1$, $\vec{F}_2$, and $\vec{F}_3$ with magnitudes of F_1, F_2, and F_3 respectively. Find the resultant moment of the three forces about the x -, y -, and z - axes.

Define the positive direction of the moments using the right - hand rule.

$M_x = d_3 \cdot F_1 + d_1 \cdot F_2$

$M_y = -d_4 \cdot F_2 - d_3 \cdot F_3$

$M_z = -d_1 \cdot F_3$