



Consider a letter “C”, which is obtained by cutting a large square plate of $(2a \times 2a)$ by an $(a \times a)$ -square. See the sketch.

Determine the x -coordinate of the center of mass, x_{cm} .

- A) $x_{cm} < a$.
- B) $x_{cm} = a$.
- C) $x_{cm} > a$.

With the hole, we expect the x -coordinate of the center of mass to be less than a , which is the location of the center of mass when there is no hole. Answer **B**.