



**Figure 2.26** Calculating the Miller index for face  $x$  on an augite crystal. (a) Face  $x$  is extended out until it intersects all three crystal axes, as shown by the shaded plane. (b) The dimensions of these intersections measured from the center of the crystal are  $i_a = 3.82$  cm,  $i_b = 3.5$  cm, and  $i_c = 2.07$  cm. The Miller index for this face is  $(111)$ . See text for discussion.