

3.28 This problem asks that a $[\bar{1}01]$ direction be drawn within a monoclinic unit cell ($a \neq b \neq c$, and $\alpha = \beta = 90^\circ \neq \gamma$). One such unit cell with its origin at point O is sketched below. For this direction, we move from the origin along the minus x -axis a units (from point O to point P). There is no projection along the y -axis since the next index is zero. Since the final index is a one, we move from point P parallel to the z -axis, c units (to point Q). Thus, the $[\bar{1}01]$ direction corresponds to the vector passing from the origin to point Q , as indicated in the figure.

