3.29   We are asked for the indices of the two directions sketched in the figure. For direction 1, the projection on the *x*-axis is *a,* while projections on the *y*- and *z*-axes are *-b*/2 and *-c,* respectively. This is a $[2\bar{1}\bar{2}]$ direction as indicated in the summary below.

	$\underline{x}$	$\underline{y}$	$\underline{z}$
Projections	*a*	*-b*/2	*-c*
Projections in terms of *a, b,* and *c*	1	-1/2	-1
Reduction to integers	2	-1	-2
Enclosure		$[2\bar{1}\bar{2}]$	

Direction 2 is [102] as summarized below.

	$\underline{x}$	$\underline{y}$	$\underline{z}$
Projections	*a*/2	0*b*	*c*
Projections in terms of *a, b,* and *c*	1/2	0	1
Reduction to integers	1	0	2
Enclosure		[102]	