3.40 For plane A we will leave the origin at the unit cell as shown. If we extend this plane back into the plane of the page, then it is a $(11\bar{1})$ plane, as summarized below.

	x	y	z
Intercepts	a	b	$-c$
Intercepts in terms of a, b, and c	1	1	-1
Reciprocals of intercepts	1	1	-1
Reduction		not necessary	
Enclosure		$(11\bar{1})$	

[*Note:* If we move the origin one unit cell distance parallel to the x axis and then one unit cell distance parallel to the y axis, the direction becomes $(\bar{1}\,\bar{1}\,1)$].

For plane B we will leave the origin of the unit cell as shown; this is a (230) plane, as summarized below.

	x	y	z
Intercepts	$\frac{a}{2}$	$\frac{b}{3}$	∞c
Intercepts in terms of a, b, and c	$\frac{1}{2}$	$\frac{1}{3}$	∞
Reciprocals of intercepts	2	3	0
Enclosure		(230)	