

3.41 For plane A we will move the origin of the coordinate system one unit cell distance to the right along the y axis; thus, this is a  $(1\bar{1}0)$  plane, as summarized below.

	$\underline{x}$	$\underline{y}$	$\underline{z}$
Intercepts	$\frac{a}{2}$	$-\frac{b}{2}$	$\infty c$
Intercepts in terms of $a$ , $b$ , and $c$	$\frac{1}{2}$	$-\frac{1}{2}$	$\infty$
Reciprocals of intercepts	2	-2	0
Reduction	1	-1	0
Enclosure		$(1\bar{1}0)$	

For plane B we will leave the origin of the unit cell as shown; thus, this is a  $(122)$  plane, as summarized below.

	$\underline{x}$	$\underline{y}$	$\underline{z}$
Intercepts	$a$	$\frac{b}{2}$	$\frac{c}{2}$
Intercepts in terms of $a$ , $b$ , and $c$	1	$\frac{1}{2}$	$\frac{1}{2}$
Reciprocals of intercepts	1	2	2
Reduction		not necessary	
Enclosure		$(122)$	