

Hence, this is a  $(2\bar{1}\bar{1}0)$  plane.

(d) For this plane, intersections with the  $a_1$ ,  $a_2$ , and  $z$  axes are  $-a$ ,  $a$ , and  $c/2$ , respectively. In terms of  $a$  and  $c$  these intersections are  $-1$ ,  $1$ , and  $1/2$ , the respective reciprocals of which are  $-1$ ,  $1$ , and  $2$ . This means that

$$h = -1$$

$$k = 1$$

$$l = 2$$

Now, from Equation 3.7, the value of  $i$  is

$$i = -(h + k) = -(-1 + 1) = 0$$

Therefore, this is a  $(\bar{1}102)$  plane.