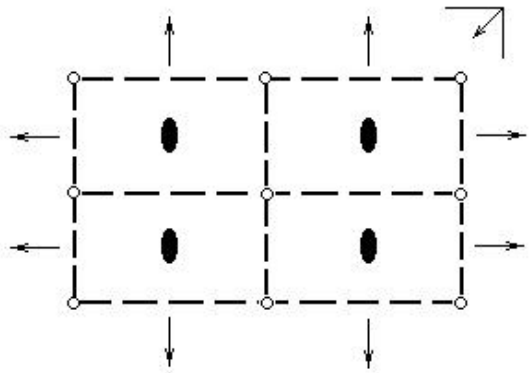
The following space group symmetry diagrams are for primitive (*P*) orthorhombic space groups. For each write down the symmetry axis (either **2** or $\mathbf{2_1}$) that is parallel to each major axis, and give the symmetry plane (***a, b, c, n***, or ***m***) that is normal (perpendicular)to each. Give the simplified Hermann-Mauguin symbol for the space group. In each figure, ***a*** is vertical, ***b*** horizontal, and ***c*** normal to page.

1

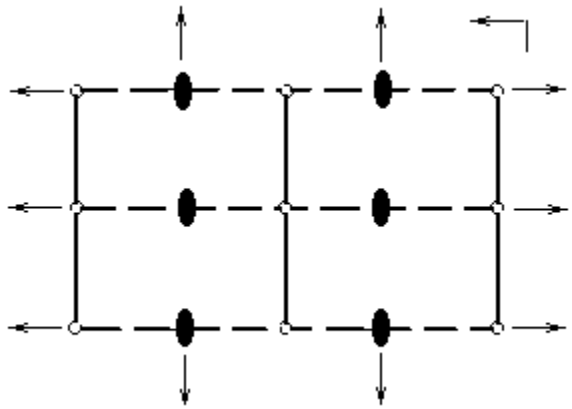
	axis	plane
a	_____	_____
b	_____	_____
c	_____	_____
H-Msymbol	_____	
Point Group	_____	



P 2/b 2/a 2/n = Pban PG = 2/m 2/m 2/m

2.

	axis	plane
a	_____	_____
b	_____	_____
c	_____	_____
H-Msymbol	_____	
Point Group	_____	

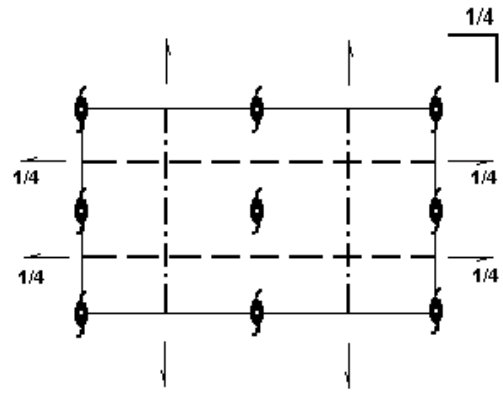


P 2/b 2/m 2/b = Pbmb PG = 2/m 2/m 2/m

	axis	plane
a	_____	_____
b	_____	_____
c	_____	_____

H-Msymbol _____

Point Group _____



3.

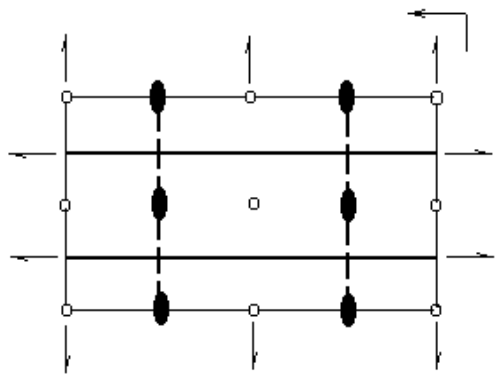
P 2_1/b 2_1/n 2_1/m = Pbnm PG = 2/m 2/m 2/m

4.

	axis	plane
a	_____	_____
b	_____	_____
c	_____	_____

H-Msymbol _____

Point Group _____



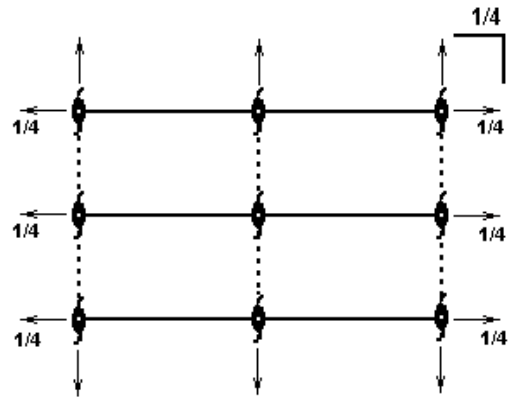
P 2_1/m 2_1/a 2/b = Pmab PG = 2/m 2/m 2/m

5.

	axis	plane
a	_____	_____
b	_____	_____
c	_____	_____

H-Msymbol _____

Point Group _____



P 2/m 2/c 2_1/m = Pmcm PG = 2/m 2/m 2/m