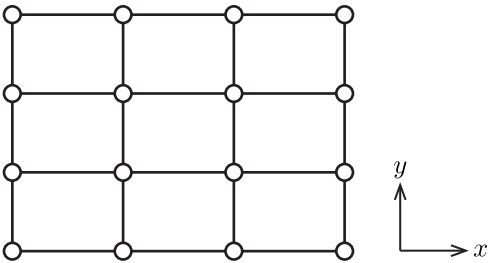
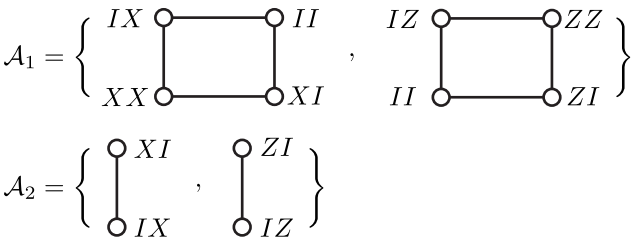
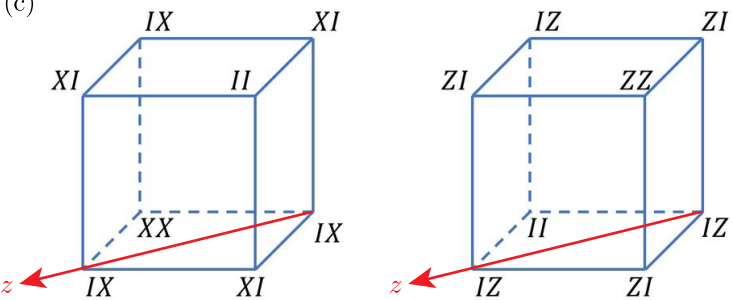
(a)


y
x

(b)


$\mathcal{A}_1 =$
IX
II
XX
XI
IZ
ZZ
II
ZI
$\mathcal{A}_2 =$
XI
IX
ZI
IZ

(c)


IX
XI
XI
II
XX
IX
z
IX
XI
IZ
ZI
ZI
ZZ
II
IZ
z
IZ
ZI

G_c^X G_c^Z