$Ca_3Al_2O_6$ Structure: A2B3C6_cP264_205_2d_ab2c2d_6d-001
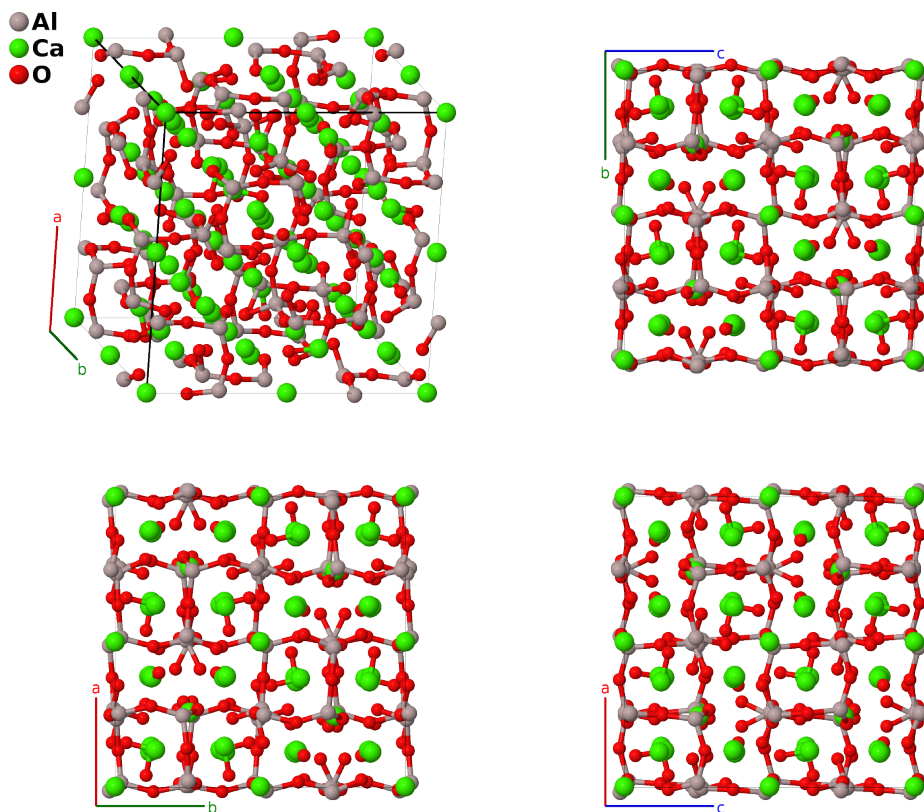
This structure originally had the label `A2B3C6_cP264_205_2d_ab2c2d_6d`. Calls to that address will be redirected here.

https://aflow.org/p/Q2JD

https://aflow.org/p/A2B3C6_cP264_205_2d_ab2c2d_6d-001

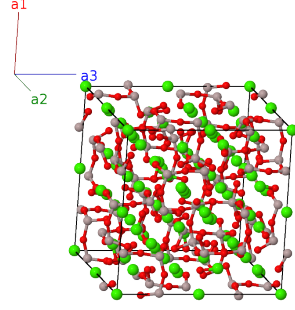|	
Prototype	$Al_2Ca_3O_6$
AFLOW prototype label	A2B3C6_cP264_205_2d_ab2c2d_6d-001
ICSD	1841
Pearson symbol	cP264
Space group number	205
Space group symbol	$Pa\overline{3}$
AFLOW prototype command	aflow --proto=A2B3C6_cP264_205_2d_ab2c2d_6d-001 --params=$a, x_3, x_4, x_5, y_5, z_5, x_6, y_6, z_6, x_7, y_7, z_7, x_8, y_8, z_8, x_9, y_9, z_9, x_{10}, y_{10}, z_{10}, x_{11}, y_{11}, z_{11}, x_{12}, y_{12}, z_{12}, x_{13}, y_{13}, z_{13}, x_{14}, y_{14}, z_{14}$

- This is a redetermination of the $E9_1$ ($Ca_3Al_2O_6$) structure. The lattice constant of the new unit cell is twice the original, giving a volume eight times larger.

Simple Cubic primitive vectors

$$\mathbf{a_1} = a\,\hat{\mathbf{x}}$$
$$\mathbf{a_2} = a\,\hat{\mathbf{y}}$$
$$\mathbf{a_3} = a\,\hat{\mathbf{z}}$$

Basis vectors

		Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
$\mathbf{B_1}$	$=$	0	$=$	0	(4a)	Ca I
$\mathbf{B_2}$	$=$	$\frac{1}{2}\mathbf{a_1} + \frac{1}{2}\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}} + \frac{1}{2}a\,\hat{\mathbf{z}}$	(4a)	Ca I
$\mathbf{B_3}$	$=$	$\frac{1}{2}\mathbf{a_2} + \frac{1}{2}\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{y}} + \frac{1}{2}a\,\hat{\mathbf{z}}$	(4a)	Ca I
$\mathbf{B_4}$	$=$	$\frac{1}{2}\mathbf{a_1} + \frac{1}{2}\mathbf{a_2}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}} + \frac{1}{2}a\,\hat{\mathbf{y}}$	(4a)	Ca I
$\mathbf{B_5}$	$=$	$\frac{1}{2}\mathbf{a_1} + \frac{1}{2}\mathbf{a_2} + \frac{1}{2}\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}} + \frac{1}{2}a\,\hat{\mathbf{y}} + \frac{1}{2}a\,\hat{\mathbf{z}}$	(4b)	Ca II
$\mathbf{B_6}$	$=$	$\frac{1}{2}\mathbf{a_2}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{y}}$	(4b)	Ca II
$\mathbf{B_7}$	$=$	$\frac{1}{2}\mathbf{a_1}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}}$	(4b)	Ca II
$\mathbf{B_8}$	$=$	$\frac{1}{2}\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{z}}$	(4b)	Ca II
$\mathbf{B_9}$	$=$	$x_3\,\mathbf{a_1} + x_3\,\mathbf{a_2} + x_3\,\mathbf{a_3}$	$=$	$ax_3\,\hat{\mathbf{x}} + ax_3\,\hat{\mathbf{y}} + ax_3\,\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{10}}$	$=$	$-\left(x_3 - \frac{1}{2}\right)\mathbf{a_1} - x_3\,\mathbf{a_2} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{x}} - ax_3\,\hat{\mathbf{y}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{11}}$	$=$	$-x_3\,\mathbf{a_1} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_2} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-ax_3\,\hat{\mathbf{x}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{12}}$	$=$	$\left(x_3 + \frac{1}{2}\right)\mathbf{a_1} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_2} - x_3\,\mathbf{a_3}$	$=$	$a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{y}} - ax_3\,\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{13}}$	$=$	$-x_3\,\mathbf{a_1} - x_3\,\mathbf{a_2} - x_3\,\mathbf{a_3}$	$=$	$-ax_3\,\hat{\mathbf{x}} - ax_3\,\hat{\mathbf{y}} - ax_3\,\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{14}}$	$=$	$\left(x_3 + \frac{1}{2}\right)\mathbf{a_1} + x_3\,\mathbf{a_2} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{x}} + ax_3\,\hat{\mathbf{y}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{15}}$	$=$	$x_3\,\mathbf{a_1} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_2} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$ax_3\,\hat{\mathbf{x}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{16}}$	$=$	$-\left(x_3 - \frac{1}{2}\right)\mathbf{a_1} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_2} + x_3\,\mathbf{a_3}$	$=$	$-a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{y}} + ax_3\,\hat{\mathbf{z}}$	(8c)	Ca III
$\mathbf{B_{17}}$	$=$	$x_4\,\mathbf{a_1} + x_4\,\mathbf{a_2} + x_4\,\mathbf{a_3}$	$=$	$ax_4\,\hat{\mathbf{x}} + ax_4\,\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{18}}$	$=$	$-\left(x_4 - \frac{1}{2}\right)\mathbf{a_1} - x_4\,\mathbf{a_2} + \left(x_4 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{x}} - ax_4\,\hat{\mathbf{y}} + a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{19}}$	$=$	$-x_4\,\mathbf{a_1} + \left(x_4 + \frac{1}{2}\right)\mathbf{a_2} - \left(x_4 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-ax_4\,\hat{\mathbf{x}} + a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{20}}$	$=$	$\left(x_4 + \frac{1}{2}\right)\mathbf{a_1} - \left(x_4 - \frac{1}{2}\right)\mathbf{a_2} - x_4\,\mathbf{a_3}$	$=$	$a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{y}} - ax_4\,\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{21}}$	$=$	$-x_4\,\mathbf{a_1} - x_4\,\mathbf{a_2} - x_4\,\mathbf{a_3}$	$=$	$-ax_4\,\hat{\mathbf{x}} - ax_4\,\hat{\mathbf{y}} - ax_4\,\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{22}}$	$=$	$\left(x_4 + \frac{1}{2}\right)\mathbf{a_1} + x_4\,\mathbf{a_2} - \left(x_4 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{x}} + ax_4\,\hat{\mathbf{y}} - a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca IV
$\mathbf{B_{23}}$	$=$	$x_4\,\mathbf{a_1} - \left(x_4 - \frac{1}{2}\right)\mathbf{a_2} + \left(x_4 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$ax_4\,\hat{\mathbf{x}} - a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_4 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8c)	Ca IV

$$\mathbf{B_{24}} = -\left(x_4 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_4 + \tfrac{1}{2}\right)\mathbf{a}_2 + x_4\,\mathbf{a}_3 = -a\left(x_4 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_4 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}} \quad (8c) \quad \text{Ca IV}$$

$$\mathbf{B_{25}} = x_5\,\mathbf{a}_1 + y_5\,\mathbf{a}_2 + z_5\,\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{26}} = -\left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_1 - y_5\,\mathbf{a}_2 + \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{27}} = -x_5\,\mathbf{a}_1 + \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} + a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{28}} = \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_2 - z_5\,\mathbf{a}_3 = a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{29}} = z_5\,\mathbf{a}_1 + x_5\,\mathbf{a}_2 + y_5\,\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{30}} = \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_2 - y_5\,\mathbf{a}_3 = a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{31}} = -\left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_1 - x_5\,\mathbf{a}_2 + \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{32}} = -z_5\,\mathbf{a}_1 + \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} + a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{33}} = y_5\,\mathbf{a}_1 + z_5\,\mathbf{a}_2 + x_5\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{34}} = -y_5\,\mathbf{a}_1 + \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} + a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{35}} = \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_2 - x_5\,\mathbf{a}_3 = a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{36}} = -\left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_1 - z_5\,\mathbf{a}_2 + \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{37}} = -x_5\,\mathbf{a}_1 - y_5\,\mathbf{a}_2 - z_5\,\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{38}} = \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_1 + y_5\,\mathbf{a}_2 - \left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{39}} = x_5\,\mathbf{a}_1 - \left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} - a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{40}} = -\left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_2 + z_5\,\mathbf{a}_3 = -a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{41}} = -z_5\,\mathbf{a}_1 - x_5\,\mathbf{a}_2 - y_5\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{42}} = -\left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_2 + y_5\,\mathbf{a}_3 = -a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{43}} = \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_1 + x_5\,\mathbf{a}_2 - \left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{44}} = z_5\,\mathbf{a}_1 - \left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} - a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{45}} = -y_5\,\mathbf{a}_1 - z_5\,\mathbf{a}_2 - x_5\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{46}} = y_5\,\mathbf{a}_1 - \left(z_5 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_5 + \tfrac{1}{2}\right)\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} - a\left(z_5 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_5 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{47}} = -\left(y_5 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_5 + \tfrac{1}{2}\right)\mathbf{a}_2 + x_5\,\mathbf{a}_3 = -a\left(y_5 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_5 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{48}} = \left(y_5 + \tfrac{1}{2}\right)\mathbf{a}_1 + z_5\,\mathbf{a}_2 - \left(x_5 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(y_5 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - a\left(x_5 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al I}$$

$$\mathbf{B_{49}} = x_6\,\mathbf{a}_1 + y_6\,\mathbf{a}_2 + z_6\,\mathbf{a}_3 = ax_6\,\hat{\mathbf{x}} + ay_6\,\hat{\mathbf{y}} + az_6\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{50}} = -\left(x_6 - \tfrac{1}{2}\right)\mathbf{a}_1 - y_6\,\mathbf{a}_2 + \left(z_6 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_6\,\hat{\mathbf{y}} + a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{51}} = -x_6\,\mathbf{a}_1 + \left(y_6 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_6 - \tfrac{1}{2}\right)\mathbf{a}_3 = -ax_6\,\hat{\mathbf{x}} + a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{52}} = \left(x_6 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_6 - \tfrac{1}{2}\right)\mathbf{a}_2 - z_6\,\mathbf{a}_3 = a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_6\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{53}} = z_6\,\mathbf{a}_1 + x_6\,\mathbf{a}_2 + y_6\,\mathbf{a}_3 = az_6\,\hat{\mathbf{x}} + ax_6\,\hat{\mathbf{y}} + ay_6\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{54}} = \left(z_6 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_6 - \tfrac{1}{2}\right)\mathbf{a}_2 - y_6\,\mathbf{a}_3 = a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_6\,\hat{\mathbf{z}} \quad (24d) \quad \text{Al II}$$

$$\mathbf{B_{55}} = -\left(z_6 - \tfrac{1}{2}\right)\mathbf{a_1} - x_6\,\mathbf{a_2} + \left(y_6 + \tfrac{1}{2}\right)\mathbf{a_3} = -a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_6\,\hat{\mathbf{y}} + a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{56}} = -z_6\,\mathbf{a_1} + \left(x_6 + \tfrac{1}{2}\right)\mathbf{a_2} - \left(y_6 - \tfrac{1}{2}\right)\mathbf{a_3} = -az_6\,\hat{\mathbf{x}} + a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{57}} = y_6\,\mathbf{a_1} + z_6\,\mathbf{a_2} + x_6\,\mathbf{a_3} = ay_6\,\hat{\mathbf{x}} + az_6\,\hat{\mathbf{y}} + ax_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{58}} = -y_6\,\mathbf{a_1} + \left(z_6 + \tfrac{1}{2}\right)\mathbf{a_2} - \left(x_6 - \tfrac{1}{2}\right)\mathbf{a_3} = -ay_6\,\hat{\mathbf{x}} + a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{59}} = \left(y_6 + \tfrac{1}{2}\right)\mathbf{a_1} - \left(z_6 - \tfrac{1}{2}\right)\mathbf{a_2} - x_6\,\mathbf{a_3} = a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{60}} = -\left(y_6 - \tfrac{1}{2}\right)\mathbf{a_1} - z_6\,\mathbf{a_2} + \left(x_6 + \tfrac{1}{2}\right)\mathbf{a_3} = -a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_6\,\hat{\mathbf{y}} + a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{61}} = -x_6\,\mathbf{a_1} - y_6\,\mathbf{a_2} - z_6\,\mathbf{a_3} = -ax_6\,\hat{\mathbf{x}} - ay_6\,\hat{\mathbf{y}} - az_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{62}} = \left(x_6 + \tfrac{1}{2}\right)\mathbf{a_1} + y_6\,\mathbf{a_2} - \left(z_6 - \tfrac{1}{2}\right)\mathbf{a_3} = a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_6\,\hat{\mathbf{y}} - a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{63}} = x_6\,\mathbf{a_1} - \left(y_6 - \tfrac{1}{2}\right)\mathbf{a_2} + \left(z_6 + \tfrac{1}{2}\right)\mathbf{a_3} = ax_6\,\hat{\mathbf{x}} - a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{64}} = -\left(x_6 - \tfrac{1}{2}\right)\mathbf{a_1} + \left(y_6 + \tfrac{1}{2}\right)\mathbf{a_2} + z_6\,\mathbf{a_3} = -a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{65}} = -z_6\,\mathbf{a_1} - x_6\,\mathbf{a_2} - y_6\,\mathbf{a_3} = -az_6\,\hat{\mathbf{x}} - ax_6\,\hat{\mathbf{y}} - ay_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{66}} = -\left(z_6 - \tfrac{1}{2}\right)\mathbf{a_1} + \left(x_6 + \tfrac{1}{2}\right)\mathbf{a_2} + y_6\,\mathbf{a_3} = -a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{67}} = \left(z_6 + \tfrac{1}{2}\right)\mathbf{a_1} + x_6\,\mathbf{a_2} - \left(y_6 - \tfrac{1}{2}\right)\mathbf{a_3} = a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_6\,\hat{\mathbf{y}} - a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{68}} = z_6\,\mathbf{a_1} - \left(x_6 - \tfrac{1}{2}\right)\mathbf{a_2} + \left(y_6 + \tfrac{1}{2}\right)\mathbf{a_3} = az_6\,\hat{\mathbf{x}} - a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{69}} = -y_6\,\mathbf{a_1} - z_6\,\mathbf{a_2} - x_6\,\mathbf{a_3} = -ay_6\,\hat{\mathbf{x}} - az_6\,\hat{\mathbf{y}} - ax_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{70}} = y_6\,\mathbf{a_1} - \left(z_6 - \tfrac{1}{2}\right)\mathbf{a_2} + \left(x_6 + \tfrac{1}{2}\right)\mathbf{a_3} = ay_6\,\hat{\mathbf{x}} - a\left(z_6 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_6 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{71}} = -\left(y_6 - \tfrac{1}{2}\right)\mathbf{a_1} + \left(z_6 + \tfrac{1}{2}\right)\mathbf{a_2} + x_6\,\mathbf{a_3} = -a\left(y_6 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_6 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_6\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{72}} = \left(y_6 + \tfrac{1}{2}\right)\mathbf{a_1} + z_6\,\mathbf{a_2} - \left(x_6 - \tfrac{1}{2}\right)\mathbf{a_3} = a\left(y_6 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_6\,\hat{\mathbf{y}} - a\left(x_6 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Al II}$$

$$\mathbf{B_{73}} = x_7\,\mathbf{a_1} + y_7\,\mathbf{a_2} + z_7\,\mathbf{a_3} = ax_7\,\hat{\mathbf{x}} + ay_7\,\hat{\mathbf{y}} + az_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{74}} = -\left(x_7 - \tfrac{1}{2}\right)\mathbf{a_1} - y_7\,\mathbf{a_2} + \left(z_7 + \tfrac{1}{2}\right)\mathbf{a_3} = -a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_7\,\hat{\mathbf{y}} + a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{75}} = -x_7\,\mathbf{a_1} + \left(y_7 + \tfrac{1}{2}\right)\mathbf{a_2} - \left(z_7 - \tfrac{1}{2}\right)\mathbf{a_3} = -ax_7\,\hat{\mathbf{x}} + a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{76}} = \left(x_7 + \tfrac{1}{2}\right)\mathbf{a_1} - \left(y_7 - \tfrac{1}{2}\right)\mathbf{a_2} - z_7\,\mathbf{a_3} = a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{77}} = z_7\,\mathbf{a_1} + x_7\,\mathbf{a_2} + y_7\,\mathbf{a_3} = az_7\,\hat{\mathbf{x}} + ax_7\,\hat{\mathbf{y}} + ay_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{78}} = \left(z_7 + \tfrac{1}{2}\right)\mathbf{a_1} - \left(x_7 - \tfrac{1}{2}\right)\mathbf{a_2} - y_7\,\mathbf{a_3} = a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{79}} = -\left(z_7 - \tfrac{1}{2}\right)\mathbf{a_1} - x_7\,\mathbf{a_2} + \left(y_7 + \tfrac{1}{2}\right)\mathbf{a_3} = -a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_7\,\hat{\mathbf{y}} + a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{80}} = -z_7\,\mathbf{a_1} + \left(x_7 + \tfrac{1}{2}\right)\mathbf{a_2} - \left(y_7 - \tfrac{1}{2}\right)\mathbf{a_3} = -az_7\,\hat{\mathbf{x}} + a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{81}} = y_7\,\mathbf{a_1} + z_7\,\mathbf{a_2} + x_7\,\mathbf{a_3} = ay_7\,\hat{\mathbf{x}} + az_7\,\hat{\mathbf{y}} + ax_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{82}} = -y_7\,\mathbf{a_1} + \left(z_7 + \tfrac{1}{2}\right)\mathbf{a_2} - \left(x_7 - \tfrac{1}{2}\right)\mathbf{a_3} = -ay_7\,\hat{\mathbf{x}} + a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{83}} = \left(y_7 + \tfrac{1}{2}\right)\mathbf{a_1} - \left(z_7 - \tfrac{1}{2}\right)\mathbf{a_2} - x_7\,\mathbf{a_3} = a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{84}} = -\left(y_7 - \tfrac{1}{2}\right)\mathbf{a_1} - z_7\,\mathbf{a_2} + \left(x_7 + \tfrac{1}{2}\right)\mathbf{a_3} = -a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_7\,\hat{\mathbf{y}} + a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{85}} = -x_7\,\mathbf{a_1} - y_7\,\mathbf{a_2} - z_7\,\mathbf{a_3} = -ax_7\,\hat{\mathbf{x}} - ay_7\,\hat{\mathbf{y}} - az_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{86}} = \left(x_7 + \tfrac{1}{2}\right)\mathbf{a}_1 + y_7\,\mathbf{a}_2 - \left(z_7 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_7\,\hat{\mathbf{y}} - a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{87}} = x_7\,\mathbf{a}_1 - \left(y_7 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_7 + \tfrac{1}{2}\right)\mathbf{a}_3 = ax_7\,\hat{\mathbf{x}} - a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{88}} = -\left(x_7 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_7 + \tfrac{1}{2}\right)\mathbf{a}_2 + z_7\,\mathbf{a}_3 = -a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{89}} = -z_7\,\mathbf{a}_1 - x_7\,\mathbf{a}_2 - y_7\,\mathbf{a}_3 = -az_7\,\hat{\mathbf{x}} - ax_7\,\hat{\mathbf{y}} - ay_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{90}} = -\left(z_7 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_7 + \tfrac{1}{2}\right)\mathbf{a}_2 + y_7\,\mathbf{a}_3 = -a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{91}} = \left(z_7 + \tfrac{1}{2}\right)\mathbf{a}_1 + x_7\,\mathbf{a}_2 - \left(y_7 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_7\,\hat{\mathbf{y}} - a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{92}} = z_7\,\mathbf{a}_1 - \left(x_7 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_7 + \tfrac{1}{2}\right)\mathbf{a}_3 = az_7\,\hat{\mathbf{x}} - a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{93}} = -y_7\,\mathbf{a}_1 - z_7\,\mathbf{a}_2 - x_7\,\mathbf{a}_3 = -ay_7\,\hat{\mathbf{x}} - az_7\,\hat{\mathbf{y}} - ax_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{94}} = y_7\,\mathbf{a}_1 - \left(z_7 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_7 + \tfrac{1}{2}\right)\mathbf{a}_3 = ay_7\,\hat{\mathbf{x}} - a\left(z_7 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_7 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{95}} = -\left(y_7 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_7 + \tfrac{1}{2}\right)\mathbf{a}_2 + x_7\,\mathbf{a}_3 = -a\left(y_7 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_7 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_7\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{96}} = \left(y_7 + \tfrac{1}{2}\right)\mathbf{a}_1 + z_7\,\mathbf{a}_2 - \left(x_7 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(y_7 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_7\,\hat{\mathbf{y}} - a\left(x_7 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca V}$$

$$\mathbf{B_{97}} = x_8\,\mathbf{a}_1 + y_8\,\mathbf{a}_2 + z_8\,\mathbf{a}_3 = ax_8\,\hat{\mathbf{x}} + ay_8\,\hat{\mathbf{y}} + az_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{98}} = -\left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_1 - y_8\,\mathbf{a}_2 + \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_8\,\hat{\mathbf{y}} + a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{99}} = -x_8\,\mathbf{a}_1 + \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_3 = -ax_8\,\hat{\mathbf{x}} + a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{100}} = \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_2 - z_8\,\mathbf{a}_3 = a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{101}} = z_8\,\mathbf{a}_1 + x_8\,\mathbf{a}_2 + y_8\,\mathbf{a}_3 = az_8\,\hat{\mathbf{x}} + ax_8\,\hat{\mathbf{y}} + ay_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{102}} = \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_2 - y_8\,\mathbf{a}_3 = a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{103}} = -\left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_1 - x_8\,\mathbf{a}_2 + \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_8\,\hat{\mathbf{y}} + a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{104}} = -z_8\,\mathbf{a}_1 + \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_3 = -az_8\,\hat{\mathbf{x}} + a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{105}} = y_8\,\mathbf{a}_1 + z_8\,\mathbf{a}_2 + x_8\,\mathbf{a}_3 = ay_8\,\hat{\mathbf{x}} + az_8\,\hat{\mathbf{y}} + ax_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{106}} = -y_8\,\mathbf{a}_1 + \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_3 = -ay_8\,\hat{\mathbf{x}} + a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{107}} = \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_2 - x_8\,\mathbf{a}_3 = a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{108}} = -\left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_1 - z_8\,\mathbf{a}_2 + \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = -a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_8\,\hat{\mathbf{y}} + a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{109}} = -x_8\,\mathbf{a}_1 - y_8\,\mathbf{a}_2 - z_8\,\mathbf{a}_3 = -ax_8\,\hat{\mathbf{x}} - ay_8\,\hat{\mathbf{y}} - az_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{110}} = \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_1 + y_8\,\mathbf{a}_2 - \left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_8\,\hat{\mathbf{y}} - a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{111}} = x_8\,\mathbf{a}_1 - \left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = ax_8\,\hat{\mathbf{x}} - a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{112}} = -\left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_2 + z_8\,\mathbf{a}_3 = -a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{113}} = -z_8\,\mathbf{a}_1 - x_8\,\mathbf{a}_2 - y_8\,\mathbf{a}_3 = -az_8\,\hat{\mathbf{x}} - ax_8\,\hat{\mathbf{y}} - ay_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{114}} = -\left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_2 + y_8\,\mathbf{a}_3 = -a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{115}} = \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_1 + x_8\,\mathbf{a}_2 - \left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_3 = a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_8\,\hat{\mathbf{y}} - a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{116}} = z_8\,\mathbf{a}_1 - \left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = az_8\,\hat{\mathbf{x}} - a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{117}} = -y_8\,\mathbf{a}_1 - z_8\,\mathbf{a}_2 - x_8\,\mathbf{a}_3 = -ay_8\,\hat{\mathbf{x}} - az_8\,\hat{\mathbf{y}} - ax_8\,\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{118}} = y_8\,\mathbf{a}_1 - \left(z_8 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_8 + \tfrac{1}{2}\right)\mathbf{a}_3 = ay_8\,\hat{\mathbf{x}} - a\left(z_8 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_8 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad (24\mathrm{d}) \quad \text{Ca VI}$$

$$\mathbf{B_{119}} = -\left(y_8 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_8 + \tfrac{1}{2}\right)\mathbf{a}_2 + x_8\,\mathbf{a}_3 \quad = \quad -a\left(y_8 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_8 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_8\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{Ca VI}$$

$$\mathbf{B_{120}} = \left(y_8 + \tfrac{1}{2}\right)\mathbf{a}_1 + z_8\,\mathbf{a}_2 - \left(x_8 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(y_8 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_8\,\hat{\mathbf{y}} - a\left(x_8 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{Ca VI}$$

$$\mathbf{B_{121}} = x_9\,\mathbf{a}_1 + y_9\,\mathbf{a}_2 + z_9\,\mathbf{a}_3 \quad = \quad ax_9\,\hat{\mathbf{x}} + ay_9\,\hat{\mathbf{y}} + az_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{122}} = -\left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_1 - y_9\,\mathbf{a}_2 + \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_9\,\hat{\mathbf{y}} + a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{123}} = -x_9\,\mathbf{a}_1 + \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ax_9\,\hat{\mathbf{x}} + a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{124}} = \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_2 - z_9\,\mathbf{a}_3 \quad = \quad a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{125}} = z_9\,\mathbf{a}_1 + x_9\,\mathbf{a}_2 + y_9\,\mathbf{a}_3 \quad = \quad az_9\,\hat{\mathbf{x}} + ax_9\,\hat{\mathbf{y}} + ay_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{126}} = \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_2 - y_9\,\mathbf{a}_3 \quad = \quad a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{127}} = -\left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_1 - x_9\,\mathbf{a}_2 + \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_9\,\hat{\mathbf{y}} + a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{128}} = -z_9\,\mathbf{a}_1 + \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -az_9\,\hat{\mathbf{x}} + a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{129}} = y_9\,\mathbf{a}_1 + z_9\,\mathbf{a}_2 + x_9\,\mathbf{a}_3 \quad = \quad ay_9\,\hat{\mathbf{x}} + az_9\,\hat{\mathbf{y}} + ax_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{130}} = -y_9\,\mathbf{a}_1 + \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ay_9\,\hat{\mathbf{x}} + a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{131}} = \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_2 - x_9\,\mathbf{a}_3 \quad = \quad a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{132}} = -\left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_1 - z_9\,\mathbf{a}_2 + \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_9\,\hat{\mathbf{y}} + a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{133}} = -x_9\,\mathbf{a}_1 - y_9\,\mathbf{a}_2 - z_9\,\mathbf{a}_3 \quad = \quad -ax_9\,\hat{\mathbf{x}} - ay_9\,\hat{\mathbf{y}} - az_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{134}} = \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_1 + y_9\,\mathbf{a}_2 - \left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_9\,\hat{\mathbf{y}} - a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{135}} = x_9\,\mathbf{a}_1 - \left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ax_9\,\hat{\mathbf{x}} - a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{136}} = -\left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_2 + z_9\,\mathbf{a}_3 \quad = \quad -a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{137}} = -z_9\,\mathbf{a}_1 - x_9\,\mathbf{a}_2 - y_9\,\mathbf{a}_3 \quad = \quad -az_9\,\hat{\mathbf{x}} - ax_9\,\hat{\mathbf{y}} - ay_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{138}} = -\left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_2 + y_9\,\mathbf{a}_3 \quad = \quad -a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{139}} = \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_1 + x_9\,\mathbf{a}_2 - \left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_9\,\hat{\mathbf{y}} - a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{140}} = z_9\,\mathbf{a}_1 - \left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad az_9\,\hat{\mathbf{x}} - a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{141}} = -y_9\,\mathbf{a}_1 - z_9\,\mathbf{a}_2 - x_9\,\mathbf{a}_3 \quad = \quad -ay_9\,\hat{\mathbf{x}} - az_9\,\hat{\mathbf{y}} - ax_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{142}} = y_9\,\mathbf{a}_1 - \left(z_9 - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_9 + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ay_9\,\hat{\mathbf{x}} - a\left(z_9 - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_9 + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{143}} = -\left(y_9 - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_9 + \tfrac{1}{2}\right)\mathbf{a}_2 + x_9\,\mathbf{a}_3 \quad = \quad -a\left(y_9 - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_9 + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_9\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{144}} = \left(y_9 + \tfrac{1}{2}\right)\mathbf{a}_1 + z_9\,\mathbf{a}_2 - \left(x_9 - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(y_9 + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_9\,\hat{\mathbf{y}} - a\left(x_9 - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O I}$$

$$\mathbf{B_{145}} = x_{10}\,\mathbf{a}_1 + y_{10}\,\mathbf{a}_2 + z_{10}\,\mathbf{a}_3 \quad = \quad ax_{10}\,\hat{\mathbf{x}} + ay_{10}\,\hat{\mathbf{y}} + az_{10}\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O II}$$

$$\mathbf{B_{146}} = -\left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 - y_{10}\,\mathbf{a}_2 + \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_{10}\,\hat{\mathbf{y}} + a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O II}$$

$$\mathbf{B_{147}} = -x_{10}\,\mathbf{a}_1 + \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ax_{10}\,\hat{\mathbf{x}} + a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O II}$$

$$\mathbf{B_{148}} = \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 - z_{10}\,\mathbf{a}_3 \quad = \quad a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_{10}\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O II}$$

$$\mathbf{B_{149}} = z_{10}\,\mathbf{a}_1 + x_{10}\,\mathbf{a}_2 + y_{10}\,\mathbf{a}_3 \quad = \quad az_{10}\,\hat{\mathbf{x}} + ax_{10}\,\hat{\mathbf{y}} + ay_{10}\,\hat{\mathbf{z}} \qquad (24\mathrm{d}) \qquad \text{O II}$$

$$\mathbf{B_{150}} = \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 - y_{10}\,\mathbf{a}_3 \quad = \quad a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{151}} = -\left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 - x_{10}\,\mathbf{a}_2 + \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_{10}\,\hat{\mathbf{y}} + a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{152}} = -z_{10}\,\mathbf{a}_1 + \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -az_{10}\,\hat{\mathbf{x}} + a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{153}} = y_{10}\,\mathbf{a}_1 + z_{10}\,\mathbf{a}_2 + x_{10}\,\mathbf{a}_3 \quad = \quad ay_{10}\,\hat{\mathbf{x}} + az_{10}\,\hat{\mathbf{y}} + ax_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{154}} = -y_{10}\,\mathbf{a}_1 + \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ay_{10}\,\hat{\mathbf{x}} + a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{155}} = \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 - x_{10}\,\mathbf{a}_3 \quad = \quad a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{156}} = -\left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 - z_{10}\,\mathbf{a}_2 + \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_{10}\,\hat{\mathbf{y}} + a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{157}} = -x_{10}\,\mathbf{a}_1 - y_{10}\,\mathbf{a}_2 - z_{10}\,\mathbf{a}_3 \quad = \quad -ax_{10}\,\hat{\mathbf{x}} - ay_{10}\,\hat{\mathbf{y}} - az_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{158}} = \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 + y_{10}\,\mathbf{a}_2 - \left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_{10}\,\hat{\mathbf{y}} - a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{159}} = x_{10}\,\mathbf{a}_1 - \left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ax_{10}\,\hat{\mathbf{x}} - a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{160}} = -\left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 + z_{10}\,\mathbf{a}_3 \quad = \quad -a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{161}} = -z_{10}\,\mathbf{a}_1 - x_{10}\,\mathbf{a}_2 - y_{10}\,\mathbf{a}_3 \quad = \quad -az_{10}\,\hat{\mathbf{x}} - ax_{10}\,\hat{\mathbf{y}} - ay_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{162}} = -\left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 + y_{10}\,\mathbf{a}_3 \quad = \quad -a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{163}} = \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 + x_{10}\,\mathbf{a}_2 - \left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_{10}\,\hat{\mathbf{y}} - a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{164}} = z_{10}\,\mathbf{a}_1 - \left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad az_{10}\,\hat{\mathbf{x}} - a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{165}} = -y_{10}\,\mathbf{a}_1 - z_{10}\,\mathbf{a}_2 - x_{10}\,\mathbf{a}_3 \quad = \quad -ay_{10}\,\hat{\mathbf{x}} - az_{10}\,\hat{\mathbf{y}} - ax_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{166}} = y_{10}\,\mathbf{a}_1 - \left(z_{10} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_{10} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ay_{10}\,\hat{\mathbf{x}} - a\left(z_{10} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_{10} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{167}} = -\left(y_{10} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_{10} + \tfrac{1}{2}\right)\mathbf{a}_2 + x_{10}\,\mathbf{a}_3 \quad = \quad -a\left(y_{10} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_{10} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_{10}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{168}} = \left(y_{10} + \tfrac{1}{2}\right)\mathbf{a}_1 + z_{10}\,\mathbf{a}_2 - \left(x_{10} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(y_{10} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_{10}\,\hat{\mathbf{y}} - a\left(x_{10} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O II}$$

$$\mathbf{B_{169}} = x_{11}\,\mathbf{a}_1 + y_{11}\,\mathbf{a}_2 + z_{11}\,\mathbf{a}_3 \quad = \quad ax_{11}\,\hat{\mathbf{x}} + ay_{11}\,\hat{\mathbf{y}} + az_{11}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{170}} = -\left(x_{11} - \tfrac{1}{2}\right)\mathbf{a}_1 - y_{11}\,\mathbf{a}_2 + \left(z_{11} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(x_{11} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_{11}\,\hat{\mathbf{y}} + a\left(z_{11} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{171}} = -x_{11}\,\mathbf{a}_1 + \left(y_{11} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_{11} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ax_{11}\,\hat{\mathbf{x}} + a\left(y_{11} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_{11} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{172}} = \left(x_{11} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_{11} - \tfrac{1}{2}\right)\mathbf{a}_2 - z_{11}\,\mathbf{a}_3 \quad = \quad a\left(x_{11} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_{11} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_{11}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{173}} = z_{11}\,\mathbf{a}_1 + x_{11}\,\mathbf{a}_2 + y_{11}\,\mathbf{a}_3 \quad = \quad az_{11}\,\hat{\mathbf{x}} + ax_{11}\,\hat{\mathbf{y}} + ay_{11}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{174}} = \left(z_{11} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_{11} - \tfrac{1}{2}\right)\mathbf{a}_2 - y_{11}\,\mathbf{a}_3 \quad = \quad a\left(z_{11} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_{11} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_{11}\,\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$$\mathbf{B_{175}} = -\left(z_{11} - \tfrac{1}{2}\right)\mathbf{a}_1 - x_{11}\,\mathbf{a}_2 + \left(y_{11} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(z_{11} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_{11}\,\hat{\mathbf{y}} + a\left(y_{11} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad (24\text{d}) \qquad \text{O III}$$

$\mathbf{B_{176}} =$	$-z_{11}\,\mathbf{a}_1 + \left(x_{11} + \frac{1}{2}\right)\mathbf{a}_2 - \left(y_{11} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-az_{11}\,\hat{\mathbf{x}} + a\left(x_{11} + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_{11} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{177}} =$	$y_{11}\,\mathbf{a}_1 + z_{11}\,\mathbf{a}_2 + x_{11}\,\mathbf{a}_3$	$=$	$ay_{11}\,\hat{\mathbf{x}} + az_{11}\,\hat{\mathbf{y}} + ax_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{178}} =$	$-y_{11}\,\mathbf{a}_1 + \left(z_{11} + \frac{1}{2}\right)\mathbf{a}_2 - \left(x_{11} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-ay_{11}\,\hat{\mathbf{x}} + a\left(z_{11} + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_{11} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{179}} =$	$\left(y_{11} + \frac{1}{2}\right)\mathbf{a}_1 - \left(z_{11} - \frac{1}{2}\right)\mathbf{a}_2 - x_{11}\,\mathbf{a}_3$	$=$	$a\left(y_{11} + \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_{11} - \frac{1}{2}\right)\hat{\mathbf{y}} - ax_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{180}} =$	$-\left(y_{11} - \frac{1}{2}\right)\mathbf{a}_1 - z_{11}\,\mathbf{a}_2 + \left(x_{11} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(y_{11} - \frac{1}{2}\right)\hat{\mathbf{x}} - az_{11}\,\hat{\mathbf{y}} + a\left(x_{11} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{181}} =$	$-x_{11}\,\mathbf{a}_1 - y_{11}\,\mathbf{a}_2 - z_{11}\,\mathbf{a}_3$	$=$	$-ax_{11}\,\hat{\mathbf{x}} - ay_{11}\,\hat{\mathbf{y}} - az_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{182}} =$	$\left(x_{11} + \frac{1}{2}\right)\mathbf{a}_1 + y_{11}\,\mathbf{a}_2 - \left(z_{11} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(x_{11} + \frac{1}{2}\right)\hat{\mathbf{x}} + ay_{11}\,\hat{\mathbf{y}} - a\left(z_{11} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{183}} =$	$x_{11}\,\mathbf{a}_1 - \left(y_{11} - \frac{1}{2}\right)\mathbf{a}_2 + \left(z_{11} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$ax_{11}\,\hat{\mathbf{x}} - a\left(y_{11} - \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_{11} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{184}} =$	$-\left(x_{11} - \frac{1}{2}\right)\mathbf{a}_1 + \left(y_{11} + \frac{1}{2}\right)\mathbf{a}_2 + z_{11}\,\mathbf{a}_3$	$=$	$-a\left(x_{11} - \frac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_{11} + \frac{1}{2}\right)\hat{\mathbf{y}} + az_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{185}} =$	$-z_{11}\,\mathbf{a}_1 - x_{11}\,\mathbf{a}_2 - y_{11}\,\mathbf{a}_3$	$=$	$-az_{11}\,\hat{\mathbf{x}} - ax_{11}\,\hat{\mathbf{y}} - ay_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{186}} =$	$-\left(z_{11} - \frac{1}{2}\right)\mathbf{a}_1 + \left(x_{11} + \frac{1}{2}\right)\mathbf{a}_2 + y_{11}\,\mathbf{a}_3$	$=$	$-a\left(z_{11} - \frac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_{11} + \frac{1}{2}\right)\hat{\mathbf{y}} + ay_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{187}} =$	$\left(z_{11} + \frac{1}{2}\right)\mathbf{a}_1 + x_{11}\,\mathbf{a}_2 - \left(y_{11} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(z_{11} + \frac{1}{2}\right)\hat{\mathbf{x}} + ax_{11}\,\hat{\mathbf{y}} - a\left(y_{11} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{188}} =$	$z_{11}\,\mathbf{a}_1 - \left(x_{11} - \frac{1}{2}\right)\mathbf{a}_2 + \left(y_{11} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$az_{11}\,\hat{\mathbf{x}} - a\left(x_{11} - \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_{11} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{189}} =$	$-y_{11}\,\mathbf{a}_1 - z_{11}\,\mathbf{a}_2 - x_{11}\,\mathbf{a}_3$	$=$	$-ay_{11}\,\hat{\mathbf{x}} - az_{11}\,\hat{\mathbf{y}} - ax_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{190}} =$	$y_{11}\,\mathbf{a}_1 - \left(z_{11} - \frac{1}{2}\right)\mathbf{a}_2 + \left(x_{11} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$ay_{11}\,\hat{\mathbf{x}} - a\left(z_{11} - \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_{11} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{191}} =$	$-\left(y_{11} - \frac{1}{2}\right)\mathbf{a}_1 + \left(z_{11} + \frac{1}{2}\right)\mathbf{a}_2 + x_{11}\,\mathbf{a}_3$	$=$	$-a\left(y_{11} - \frac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_{11} + \frac{1}{2}\right)\hat{\mathbf{y}} + ax_{11}\,\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{192}} =$	$\left(y_{11} + \frac{1}{2}\right)\mathbf{a}_1 + z_{11}\,\mathbf{a}_2 - \left(x_{11} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$a\left(y_{11} + \frac{1}{2}\right)\hat{\mathbf{x}} + az_{11}\,\hat{\mathbf{y}} - a\left(x_{11} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O III
$\mathbf{B_{193}} =$	$x_{12}\,\mathbf{a}_1 + y_{12}\,\mathbf{a}_2 + z_{12}\,\mathbf{a}_3$	$=$	$ax_{12}\,\hat{\mathbf{x}} + ay_{12}\,\hat{\mathbf{y}} + az_{12}\,\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{194}} =$	$-\left(x_{12} - \frac{1}{2}\right)\mathbf{a}_1 - y_{12}\,\mathbf{a}_2 + \left(z_{12} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(x_{12} - \frac{1}{2}\right)\hat{\mathbf{x}} - ay_{12}\,\hat{\mathbf{y}} + a\left(z_{12} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{195}} =$	$-x_{12}\,\mathbf{a}_1 + \left(y_{12} + \frac{1}{2}\right)\mathbf{a}_2 - \left(z_{12} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-ax_{12}\,\hat{\mathbf{x}} + a\left(y_{12} + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_{12} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{196}} =$	$\left(x_{12} + \frac{1}{2}\right)\mathbf{a}_1 - \left(y_{12} - \frac{1}{2}\right)\mathbf{a}_2 - z_{12}\,\mathbf{a}_3$	$=$	$a\left(x_{12} + \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_{12} - \frac{1}{2}\right)\hat{\mathbf{y}} - az_{12}\,\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{197}} =$	$z_{12}\,\mathbf{a}_1 + x_{12}\,\mathbf{a}_2 + y_{12}\,\mathbf{a}_3$	$=$	$az_{12}\,\hat{\mathbf{x}} + ax_{12}\,\hat{\mathbf{y}} + ay_{12}\,\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{198}} =$	$\left(z_{12} + \frac{1}{2}\right)\mathbf{a}_1 - \left(x_{12} - \frac{1}{2}\right)\mathbf{a}_2 - y_{12}\,\mathbf{a}_3$	$=$	$a\left(z_{12} + \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_{12} - \frac{1}{2}\right)\hat{\mathbf{y}} - ay_{12}\,\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{199}} =$	$-\left(z_{12} - \frac{1}{2}\right)\mathbf{a}_1 - x_{12}\,\mathbf{a}_2 + \left(y_{12} + \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-a\left(z_{12} - \frac{1}{2}\right)\hat{\mathbf{x}} - ax_{12}\,\hat{\mathbf{y}} + a\left(y_{12} + \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{200}} =$	$-z_{12}\,\mathbf{a}_1 + \left(x_{12} + \frac{1}{2}\right)\mathbf{a}_2 - \left(y_{12} - \frac{1}{2}\right)\mathbf{a}_3$	$=$	$-az_{12}\,\hat{\mathbf{x}} + a\left(x_{12} + \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_{12} - \frac{1}{2}\right)\hat{\mathbf{z}}$	(24d)	O IV
$\mathbf{B_{201}} =$	$y_{12}\,\mathbf{a}_1 + z_{12}\,\mathbf{a}_2 + x_{12}\,\mathbf{a}_3$	$=$	$ay_{12}\,\hat{\mathbf{x}} + az_{12}\,\hat{\mathbf{y}} + ax_{12}\,\hat{\mathbf{z}}$	(24d)	O IV

$$\mathbf{B_{202}} = \quad -y_{12}\,\mathbf{a}_1 + \left(z_{12} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_{12} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ay_{12}\,\hat{\mathbf{x}} + a\left(z_{12} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_{12} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{203}} = \quad \left(y_{12} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_{12} - \tfrac{1}{2}\right)\mathbf{a}_2 - x_{12}\,\mathbf{a}_3 \quad = \quad a\left(y_{12} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_{12} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{204}} = \quad -\left(y_{12} - \tfrac{1}{2}\right)\mathbf{a}_1 - z_{12}\,\mathbf{a}_2 + \left(x_{12} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(y_{12} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_{12}\,\hat{\mathbf{y}} + a\left(x_{12} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{205}} = \quad -x_{12}\,\mathbf{a}_1 - y_{12}\,\mathbf{a}_2 - z_{12}\,\mathbf{a}_3 \quad = \quad -ax_{12}\,\hat{\mathbf{x}} - ay_{12}\,\hat{\mathbf{y}} - az_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{206}} = \quad \left(x_{12} + \tfrac{1}{2}\right)\mathbf{a}_1 + y_{12}\,\mathbf{a}_2 - \left(z_{12} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(x_{12} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_{12}\,\hat{\mathbf{y}} - a\left(z_{12} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{207}} = \quad x_{12}\,\mathbf{a}_1 - \left(y_{12} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_{12} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ax_{12}\,\hat{\mathbf{x}} - a\left(y_{12} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_{12} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{208}} = \quad -\left(x_{12} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_{12} + \tfrac{1}{2}\right)\mathbf{a}_2 + z_{12}\,\mathbf{a}_3 \quad = \quad -a\left(x_{12} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_{12} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{209}} = \quad -z_{12}\,\mathbf{a}_1 - x_{12}\,\mathbf{a}_2 - y_{12}\,\mathbf{a}_3 \quad = \quad -az_{12}\,\hat{\mathbf{x}} - ax_{12}\,\hat{\mathbf{y}} - ay_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{210}} = \quad -\left(z_{12} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_{12} + \tfrac{1}{2}\right)\mathbf{a}_2 + y_{12}\,\mathbf{a}_3 \quad = \quad -a\left(z_{12} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_{12} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{211}} = \quad \left(z_{12} + \tfrac{1}{2}\right)\mathbf{a}_1 + x_{12}\,\mathbf{a}_2 - \left(y_{12} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(z_{12} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_{12}\,\hat{\mathbf{y}} - a\left(y_{12} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{212}} = \quad z_{12}\,\mathbf{a}_1 - \left(x_{12} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_{12} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad az_{12}\,\hat{\mathbf{x}} - a\left(x_{12} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_{12} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{213}} = \quad -y_{12}\,\mathbf{a}_1 - z_{12}\,\mathbf{a}_2 - x_{12}\,\mathbf{a}_3 \quad = \quad -ay_{12}\,\hat{\mathbf{x}} - az_{12}\,\hat{\mathbf{y}} - ax_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{214}} = \quad y_{12}\,\mathbf{a}_1 - \left(z_{12} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_{12} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ay_{12}\,\hat{\mathbf{x}} - a\left(z_{12} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_{12} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{215}} = \quad -\left(y_{12} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_{12} + \tfrac{1}{2}\right)\mathbf{a}_2 + x_{12}\,\mathbf{a}_3 \quad = \quad -a\left(y_{12} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_{12} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_{12}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{216}} = \quad \left(y_{12} + \tfrac{1}{2}\right)\mathbf{a}_1 + z_{12}\,\mathbf{a}_2 - \left(x_{12} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(y_{12} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_{12}\,\hat{\mathbf{y}} - a\left(x_{12} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O IV}$$

$$\mathbf{B_{217}} = \quad x_{13}\,\mathbf{a}_1 + y_{13}\,\mathbf{a}_2 + z_{13}\,\mathbf{a}_3 \quad = \quad ax_{13}\,\hat{\mathbf{x}} + ay_{13}\,\hat{\mathbf{y}} + az_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{218}} = \quad -\left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 - y_{13}\,\mathbf{a}_2 + \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_{13}\,\hat{\mathbf{y}} + a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{219}} = \quad -x_{13}\,\mathbf{a}_1 + \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ax_{13}\,\hat{\mathbf{x}} + a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{220}} = \quad \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 - z_{13}\,\mathbf{a}_3 \quad = \quad a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{221}} = \quad z_{13}\,\mathbf{a}_1 + x_{13}\,\mathbf{a}_2 + y_{13}\,\mathbf{a}_3 \quad = \quad az_{13}\,\hat{\mathbf{x}} + ax_{13}\,\hat{\mathbf{y}} + ay_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{222}} = \quad \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 - y_{13}\,\mathbf{a}_3 \quad = \quad a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{223}} = \quad -\left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 - x_{13}\,\mathbf{a}_2 + \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_{13}\,\hat{\mathbf{y}} + a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{224}} = \quad -z_{13}\,\mathbf{a}_1 + \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -az_{13}\,\hat{\mathbf{x}} + a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{225}} = \quad y_{13}\,\mathbf{a}_1 + z_{13}\,\mathbf{a}_2 + x_{13}\,\mathbf{a}_3 \quad = \quad ay_{13}\,\hat{\mathbf{x}} + az_{13}\,\hat{\mathbf{y}} + ax_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{226}} = \quad -y_{13}\,\mathbf{a}_1 + \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ay_{13}\,\hat{\mathbf{x}} + a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{227}} = \quad \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 - x_{13}\,\mathbf{a}_3 \quad = \quad a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_{13}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O V}$$

$$\mathbf{B_{228}} = \quad -\left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 - z_{13}\,\mathbf{a}_2 + \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_{13}\,\hat{\mathbf{y}} + a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{229}} = \quad -x_{13}\,\mathbf{a}_1 - y_{13}\,\mathbf{a}_2 - z_{13}\,\mathbf{a}_3 \quad = \quad -ax_{13}\,\hat{\mathbf{x}} - ay_{13}\,\hat{\mathbf{y}} - az_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{230}} = \quad \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 + y_{13}\,\mathbf{a}_2 - \left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_{13}\,\hat{\mathbf{y}} - a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{231}} = \quad x_{13}\,\mathbf{a}_1 - \left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ax_{13}\,\hat{\mathbf{x}} - a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{232}} = \quad -\left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 + z_{13}\,\mathbf{a}_3 \quad = \quad -a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{233}} = \quad -z_{13}\,\mathbf{a}_1 - x_{13}\,\mathbf{a}_2 - y_{13}\,\mathbf{a}_3 \quad = \quad -az_{13}\,\hat{\mathbf{x}} - ax_{13}\,\hat{\mathbf{y}} - ay_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{234}} = \quad -\left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 + y_{13}\,\mathbf{a}_3 \quad = \quad -a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{235}} = \quad \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 + x_{13}\,\mathbf{a}_2 - \left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_{13}\,\hat{\mathbf{y}} - a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{236}} = \quad z_{13}\,\mathbf{a}_1 - \left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad az_{13}\,\hat{\mathbf{x}} - a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{237}} = \quad -y_{13}\,\mathbf{a}_1 - z_{13}\,\mathbf{a}_2 - x_{13}\,\mathbf{a}_3 \quad = \quad -ay_{13}\,\hat{\mathbf{x}} - az_{13}\,\hat{\mathbf{y}} - ax_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{238}} = \quad y_{13}\,\mathbf{a}_1 - \left(z_{13} - \tfrac{1}{2}\right)\mathbf{a}_2 + \left(x_{13} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad ay_{13}\,\hat{\mathbf{x}} - a\left(z_{13} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_{13} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{239}} = \quad -\left(y_{13} - \tfrac{1}{2}\right)\mathbf{a}_1 + \left(z_{13} + \tfrac{1}{2}\right)\mathbf{a}_2 + x_{13}\,\mathbf{a}_3 \quad = \quad -a\left(y_{13} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_{13} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_{13}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{240}} = \quad \left(y_{13} + \tfrac{1}{2}\right)\mathbf{a}_1 + z_{13}\,\mathbf{a}_2 - \left(x_{13} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad a\left(y_{13} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_{13}\,\hat{\mathbf{y}} - a\left(x_{13} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O V}$$

$$\mathbf{B_{241}} = \quad x_{14}\,\mathbf{a}_1 + y_{14}\,\mathbf{a}_2 + z_{14}\,\mathbf{a}_3 \quad = \quad ax_{14}\,\hat{\mathbf{x}} + ay_{14}\,\hat{\mathbf{y}} + az_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{242}} = \quad -\left(x_{14} - \tfrac{1}{2}\right)\mathbf{a}_1 - y_{14}\,\mathbf{a}_2 + \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ay_{14}\,\hat{\mathbf{y}} + a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{243}} = \quad -x_{14}\,\mathbf{a}_1 + \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(z_{14} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ax_{14}\,\hat{\mathbf{x}} + a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{244}} = \quad \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(y_{14} - \tfrac{1}{2}\right)\mathbf{a}_2 - z_{14}\,\mathbf{a}_3 \quad = \quad a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - az_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{245}} = \quad z_{14}\,\mathbf{a}_1 + x_{14}\,\mathbf{a}_2 + y_{14}\,\mathbf{a}_3 \quad = \quad az_{14}\,\hat{\mathbf{x}} + ax_{14}\,\hat{\mathbf{y}} + ay_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{246}} = \quad \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(x_{14} - \tfrac{1}{2}\right)\mathbf{a}_2 - y_{14}\,\mathbf{a}_3 \quad = \quad a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ay_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{247}} = \quad -\left(z_{14} - \tfrac{1}{2}\right)\mathbf{a}_1 - x_{14}\,\mathbf{a}_2 + \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - ax_{14}\,\hat{\mathbf{y}} + a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{248}} = \quad -z_{14}\,\mathbf{a}_1 + \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(y_{14} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -az_{14}\,\hat{\mathbf{x}} + a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{249}} = \quad y_{14}\,\mathbf{a}_1 + z_{14}\,\mathbf{a}_2 + x_{14}\,\mathbf{a}_3 \quad = \quad ay_{14}\,\hat{\mathbf{x}} + az_{14}\,\hat{\mathbf{y}} + ax_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{250}} = \quad -y_{14}\,\mathbf{a}_1 + \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a}_2 - \left(x_{14} - \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -ay_{14}\,\hat{\mathbf{x}} + a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{251}} = \quad \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a}_1 - \left(z_{14} - \tfrac{1}{2}\right)\mathbf{a}_2 - x_{14}\,\mathbf{a}_3 \quad = \quad a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} - a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} - ax_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{252}} = \quad -\left(y_{14} - \tfrac{1}{2}\right)\mathbf{a}_1 - z_{14}\,\mathbf{a}_2 + \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a}_3 \quad = \quad -a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} - az_{14}\,\hat{\mathbf{y}} + a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{253}} = \quad -x_{14}\,\mathbf{a}_1 - y_{14}\,\mathbf{a}_2 - z_{14}\,\mathbf{a}_3 \quad = \quad -ax_{14}\,\hat{\mathbf{x}} - ay_{14}\,\hat{\mathbf{y}} - az_{14}\,\hat{\mathbf{z}} \quad \text{(24d)} \quad \text{O VI}$$

$$\mathbf{B_{254}} = \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a_1} + y_{14}\,\mathbf{a_2} - \left(z_{14} - \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ay_{14}\,\hat{\mathbf{y}} - a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{255}} = x_{14}\,\mathbf{a_1} - \left(y_{14} - \tfrac{1}{2}\right)\mathbf{a_2} + \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad ax_{14}\,\hat{\mathbf{x}} - a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{256}} = -\left(x_{14} - \tfrac{1}{2}\right)\mathbf{a_1} + \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a_2} + z_{14}\,\mathbf{a_3} \quad = \quad -a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + az_{14}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{257}} = -z_{14}\,\mathbf{a_1} - x_{14}\,\mathbf{a_2} - y_{14}\,\mathbf{a_3} \quad = \quad -az_{14}\,\hat{\mathbf{x}} - ax_{14}\,\hat{\mathbf{y}} - ay_{14}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{258}} = -\left(z_{14} - \tfrac{1}{2}\right)\mathbf{a_1} + \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a_2} + y_{14}\,\mathbf{a_3} \quad = \quad -a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ay_{14}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{259}} = \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a_1} + x_{14}\,\mathbf{a_2} - \left(y_{14} - \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + ax_{14}\,\hat{\mathbf{y}} - a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{260}} = z_{14}\,\mathbf{a_1} - \left(x_{14} - \tfrac{1}{2}\right)\mathbf{a_2} + \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad az_{14}\,\hat{\mathbf{x}} - a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{261}} = -y_{14}\,\mathbf{a_1} - z_{14}\,\mathbf{a_2} - x_{14}\,\mathbf{a_3} \quad = \quad -ay_{14}\,\hat{\mathbf{x}} - az_{14}\,\hat{\mathbf{y}} - ax_{14}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{262}} = y_{14}\,\mathbf{a_1} - \left(z_{14} - \tfrac{1}{2}\right)\mathbf{a_2} + \left(x_{14} + \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad ay_{14}\,\hat{\mathbf{x}} - a\left(z_{14} - \tfrac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_{14} + \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{263}} = -\left(y_{14} - \tfrac{1}{2}\right)\mathbf{a_1} + \left(z_{14} + \tfrac{1}{2}\right)\mathbf{a_2} + x_{14}\,\mathbf{a_3} \quad = \quad -a\left(y_{14} - \tfrac{1}{2}\right)\hat{\mathbf{x}} + a\left(z_{14} + \tfrac{1}{2}\right)\hat{\mathbf{y}} + ax_{14}\,\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

$$\mathbf{B_{264}} = \left(y_{14} + \tfrac{1}{2}\right)\mathbf{a_1} + z_{14}\,\mathbf{a_2} - \left(x_{14} - \tfrac{1}{2}\right)\mathbf{a_3} \quad = \quad a\left(y_{14} + \tfrac{1}{2}\right)\hat{\mathbf{x}} + az_{14}\,\hat{\mathbf{y}} - a\left(x_{14} - \tfrac{1}{2}\right)\hat{\mathbf{z}} \qquad \text{(24d)} \qquad \text{O VI}$$

References

[1] P. Mondal and J. W. Jeffery, *The crystal structure of tricalcium aluminate, $Ca_3Al_2O_6$*, Acta Crystallogr. Sect. B **31**, 689–697 (1975), doi:10.1107/S0567740875003639.