

1 Exercise - Introduction to Group Theory

1.1 (maybe optically active molecules)

- a. The molecule may be optically active.
- b. The molecule may be optically active.
- c. The molecule may be optically active.
- d. The molecule got a center of inversion, therefore it cannot be optically active.
- e. The molecule may be optically active.

1.2 (point group of molecules)

- a. $D_{\infty h}$
- b. $C_{\infty v}$
- c. D_{5h}
- d. C_{2v}
- e. C_{2v}
- f. C_s
- g. C_{2v}
- h. D_{3h}