

Chapter 5 Corrections – updated 082606

Page 150, problem 5.4.6. : add the double underlined words (without the double underline)

5.4.6. Construct the three- and six-dimensional reflective transformations for each of four normal vectors: $\mathbf{k} = (1/2)(\mathbf{e}_1 + (\sqrt{3})\mathbf{e}_2)$, $\mathbf{p} = (1/2)(-\mathbf{e}_1 + (\sqrt{3})\mathbf{e}_2)$, $\mathbf{m} = (1/2)(\sqrt{3}\mathbf{e}_1 + \mathbf{e}_2)$, and $\mathbf{n} = (1/2)(\sqrt{3}\mathbf{e}_1 - \mathbf{e}_2)$. Show that the set of six vectors — \mathbf{k} , \mathbf{p} , \mathbf{m} , \mathbf{n} , \mathbf{e}_1 , and \mathbf{e}_2 — forms a set that makes a pattern. The pattern is such that each vector of the set of six vectors points in one of six different directions and makes angles that are each multiples of $\pi/6$ with the other vectors.

Page 164, Figure 5.13 caption: “elicoidal”-> “helical”