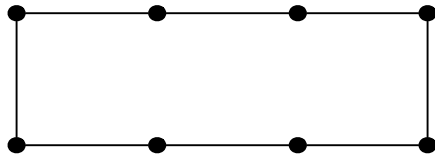


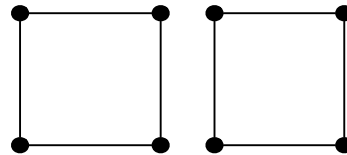
► **Problem 9.3-11 (b)**

Suppose that graphs  $G$  and  $H$  have the same number of vertices and the same number of edges. Suppose that the degree sequences of  $G$  and  $H$  are the same and that neither graph contains a triangle. Are  $G$  and  $H$  necessarily isomorphic? Explain.

**Solution.**  $G$  and  $H$  need not be isomorphic. Consider the following two graphs.



$G$



$H$

□