This is similar to the solved exercise, although the graph is a bit larger. Node a must come first, and node f must come last. Among the remaining four nodes, b must precede c, and d must precede e, but otherwise we can place them however we want.

To figure out how many orderings of these four middle nodes are possible, we note that either b or d must come first among them.

- If b comes first, then either c or d comes next.
  - If c comes next, the ordering must be b, c, d, e.

    If d comes next, then the ordering can be either b, d, c, e or b, d, e, c.
- If d comes first, we have three orderings obtained simply by reversing the roles of b, c and d, e in the above reasoning.

Thus the total number of orders for these four nodes is 6, and this is the total number of topological orderings.

[1] ex580.660.846