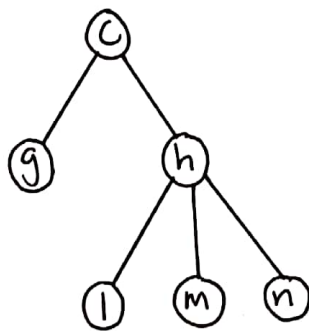


Question 1

G_2 is not a tree. Because it has 6 vertices and 6 edges.
A tree should be with n -vertices and $n-1$ edges.

Question 2

- (a) height of the rooted tree = 3
- (b) level of vertex g is level 2
- (c) internal vertices = a, b, c, d, e, h, i
- (d) leaves = j, k, f, g, l, m, n, o
- (e) ancestors of k = k, e, b, a
- (f) descendants of e = e, j, k
- (g) subtree of the tree that rooted at c



- (h) postorder = $j, k, e, f, b, g, l, m, n, h, c, o, i, d, a$

