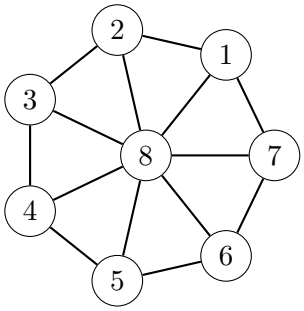
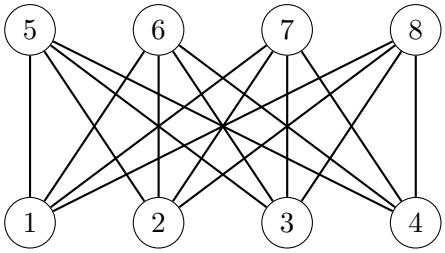
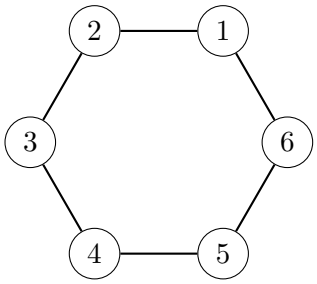
1

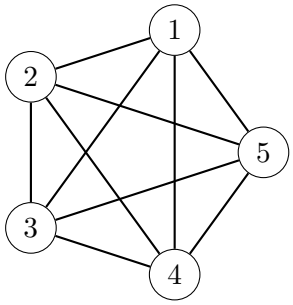
c) i. A complete graph has maximum edges. Number of edges in a complete graph with 7 vertices $= \frac{7(7-1)}{2} = 21$

ii. According to the description, the sum of degrees $= 4 + 2 \times 3 + 2 \times 2 = 14$. Therefore the number of edges should be $14 \div 2 = 7$, but the description says otherwise. So the description is not valid.









2

b) iii. 3-ary; maximum number of children a vertex has is 3.

iv. As e doesn't have any children, the subtree will have only e.

e