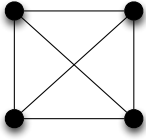


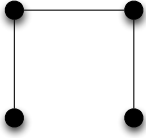
CSE373 Winter 2014
Example Questions on Minimum Spanning Trees

1.
 - (a) Draw a undirected graph with exactly 4 nodes that has exactly 0 minimum spanning trees.
 - (b) Draw a undirected graph with exactly 4 nodes that has exactly 1 minimum spanning tree.
 - (c) Draw a undirected graph with exactly 4 nodes that has exactly 3 minimum spanning trees.
 - (d) Draw a undirected graph with exactly 4 nodes that has exactly 4 minimum spanning trees.
 - (e) Draw a undirected graph with exactly 4 nodes that has exactly 8 minimum spanning trees.

2. Here is a picture of an undirected graph with 4 nodes that contains every non-self edge:



Here is a picture of just one possible spanning tree for this graph:



Draw fifteen more spanning trees for this same graph.