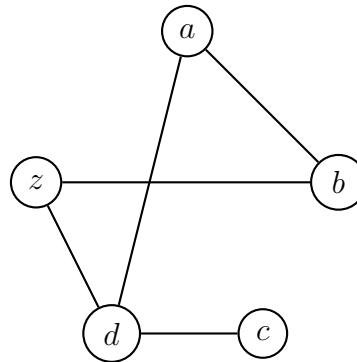


1. Consider the following graph.



- (a) Determine the vertex set.
 - (b) Determine the edge set.
 - (c) Determine the adjacency list.
 - (d) For each of the vertices, determine the degree.
2. Professor McBrain and his wife April give a party at which there are four other married couples. Some pairs of people shake hands when they meet, but naturally no couple shake hands with each other. At the end of the party the Professor asks everyone else how many people they have shaken hands with, and he receives nine different answers.
- (a) Draw a graph representing the handshakes exchanged at the party.
 - (b) How many people shook hands with April?