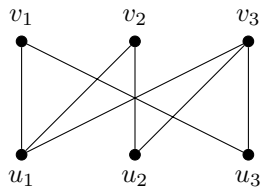
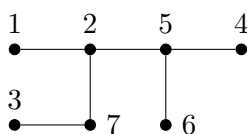


Exercise 34. (a) Use the recurrence relation $t(G) = t(G - e) + t(G/e)$ to count the number of spanning trees of



Remember to keep multiple edges!!

(b) What is the Prüfer code for the following labeled tree?



Check your answer by reversing the process and building the tree from the code.

- (c) Draw the tree whose Prüfer code is 2, 2, 5, 3, 6. Check your answer by calculating the Prüfer code that goes with your tree.
- (d) Draw a labeled K_3 (labeled with 1, 2, 3), and list all the spanning trees, and the corresponding Prüfer code. Verify that there is a bijection between the labeled trees on 3 vertices and the length-1 Prüfer codes.
- (e) How many spanning trees does K_7 have?
- (f) How many labeled trees are there on 14 vertices?