

## 1. Link words and definitions:

The goal in a CSP problem is to obtain •

A solution is •

Crypt arithmetic problems •

Deep search •

A constraint is •

Backtracking •

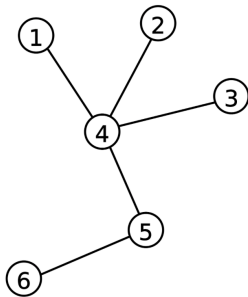
- an assignment of a value to each variable such that all the constraints are satisfied.
- a limitation or restriction
- generates all the successors of the current state
- assign distinct digits to the letters
- is a recursive search method
- a complete and consistent assignment

## 2. Complete the following sentence with the right words:

*Arcs, nodes, edge, vertices, complete, consistent, binary, solution, constraint*

An assignment is \_\_\_\_\_ if it does not violate any of the constraints.

An assignment is \_\_\_\_\_ if it includes all variables. An assignment is a \_\_\_\_\_ if it is consistent and complete; such an assignment is said to *solve* the \_\_\_\_\_ satisfaction problem.



3. A graph G consists of two types of elements, namely vertices and edges, also known as \_\_\_\_\_ and \_\_\_\_\_.
4. For each \_\_\_\_\_ (3, 4), the \_\_\_\_\_ 3 and 4 are said to be adjacent to one another.
5. There exists a \_\_\_\_\_ relation between 1 and 4

3. Given the following graph colouring problem, where we have red, green and blue colours and 4 cities connected as follows. How could we represent these connections in Matlab?

