

## Some results on trees

- ▶ Chromatic number of any tree is at most 2.
- ▶ The max clique size of any tree is at most 2.
- ▶ For every tree  $T$ , there is at least one maximum independent set that contains all the leaves of  $T$ . (Why?)
- ▶ For every tree  $T$  on  $n \geq 3$  leaves, there is a minimum vertex cover that does not contain any leaves. (Why?)
- ▶ For every tree  $T$  on  $n \geq 3$  leaves, there is a minimum dominating set that does not contain any leaves. (Why?)