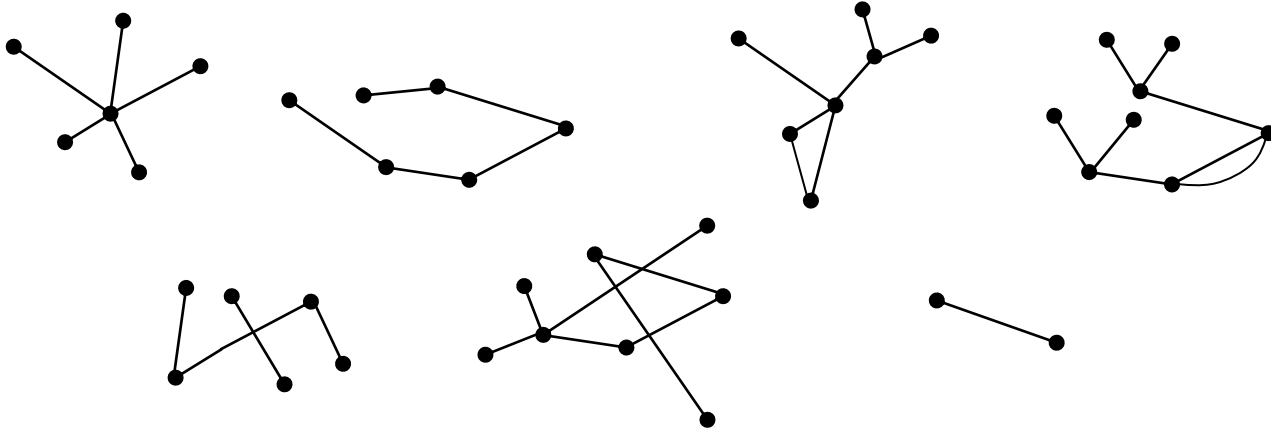


A **tree graph** is a graph that is CONNECTED and doesn't contain any CYCLES.

1. Which of the following are trees? (If it is not a tree explain why.)



2. Show every possible way of drawing a tree with 5 vertices.

What is the sum of the degrees of each vertex in each on of your diagrams above?

3. Show every possible way of drawing a tree with 6 vertices.

What is the sum of the degrees of each vertex in each on of your diagrams above?

4. What is the chromatic number of any tree graph?