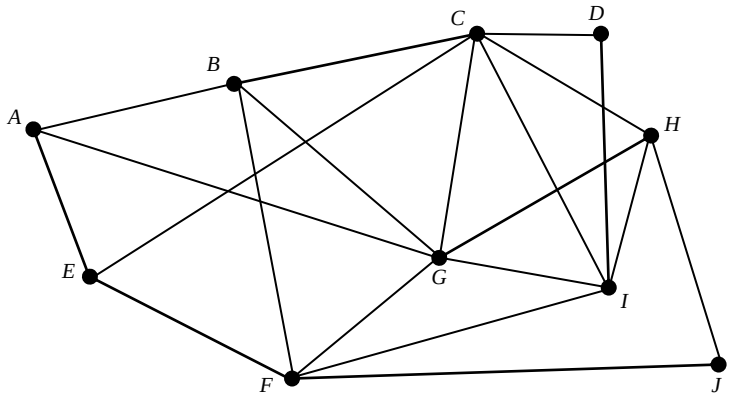
Sec 6.11 – Minimum Spanning Trees
Networks & Graphs

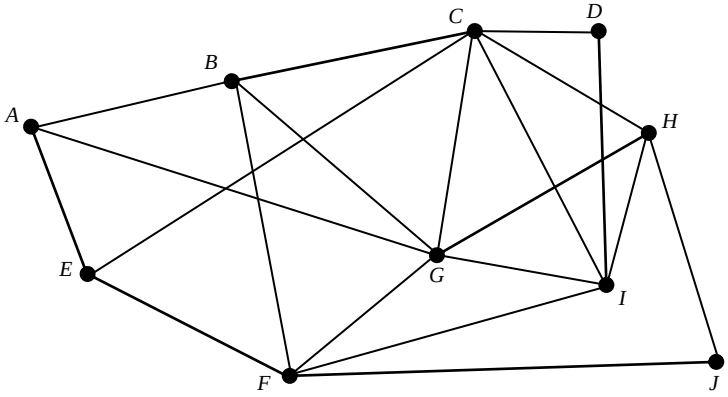
Name:

1. Create a spanning tree using the breadth-first search algorithm. Start at **A** (i.e. 0) and label each vertex with the correct number after A and show your path.



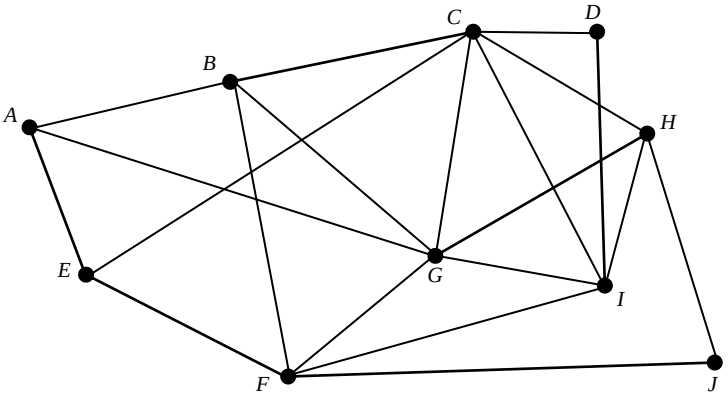
How many edges were used to create a spanning tree?

2. Create a spanning tree using the breadth-first search algorithm. Start at **G** (i.e. 0) and label each vertex with the correct number after A and show your path.



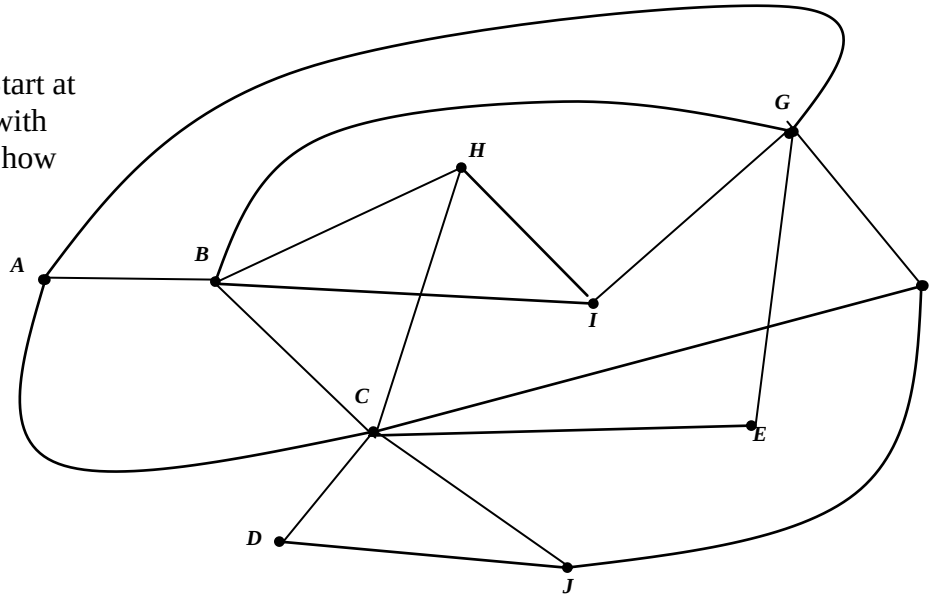
How many edges were used to create a spanning tree?

3. Create a spanning tree using the breadth-first search algorithm. Start at **J** (i.e. 0) and label each vertex with the correct number after J and show your path.

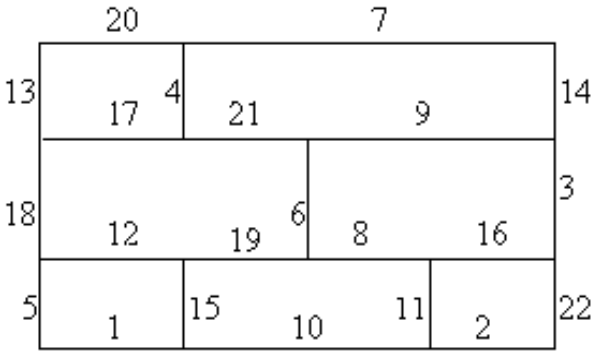


How many edges were used to create a spanning tree?

4. Create a spanning tree using the breadth-first search algorithm. Start at **A** (i.e. 0) and label each vertex with the correct number after A and show your path.



5. The minimum cost spanning tree found using Kruskal's algorithm for the following graph has a cost of____.



6. Create a minimum spanning tree using the Kruskal's algorithm. What is the total minimum length of the spanning tree? _____