

# Chapter 3-Graph Theory

## Optimal Trees

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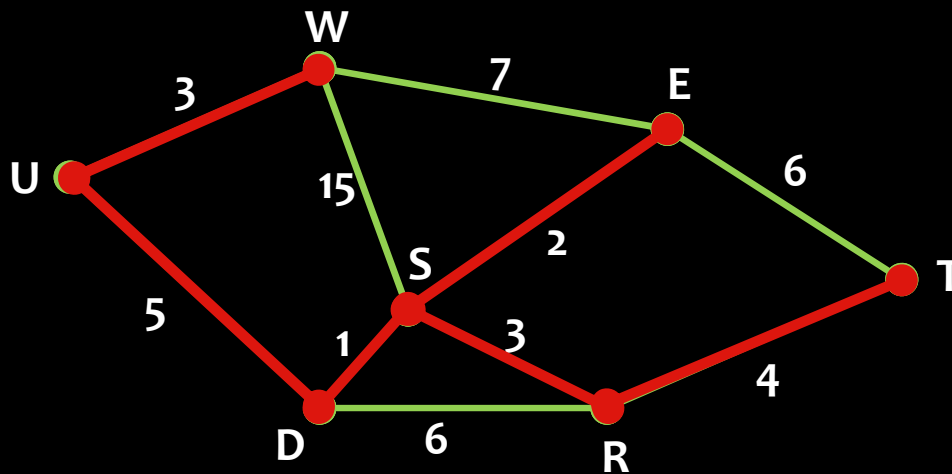
Use J.B. Kruskal's algorithm for finding the minimum or maximum routes (trees).



### Steps:

1. Choose the edge of least weight.
2. From the leftovers, choose the next edge of least weight. DO NOT CREATE A CIRCUIT!
3. Repeat steps 1 & 2 until the graph is connected.
4. \*\*\*For maximum, use highest weight.

Example 1: Find the tree of minimum value.



## Classwork/Homework

- MHS Worksheet “Chapter 3—Optimal Trees  
p. 180 # 1-10
- Online Assignment