

# 2 Center Problem on a Tree

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**Solve for the Absolute Center of the Tree**

- Use that point to split the tree into two parts

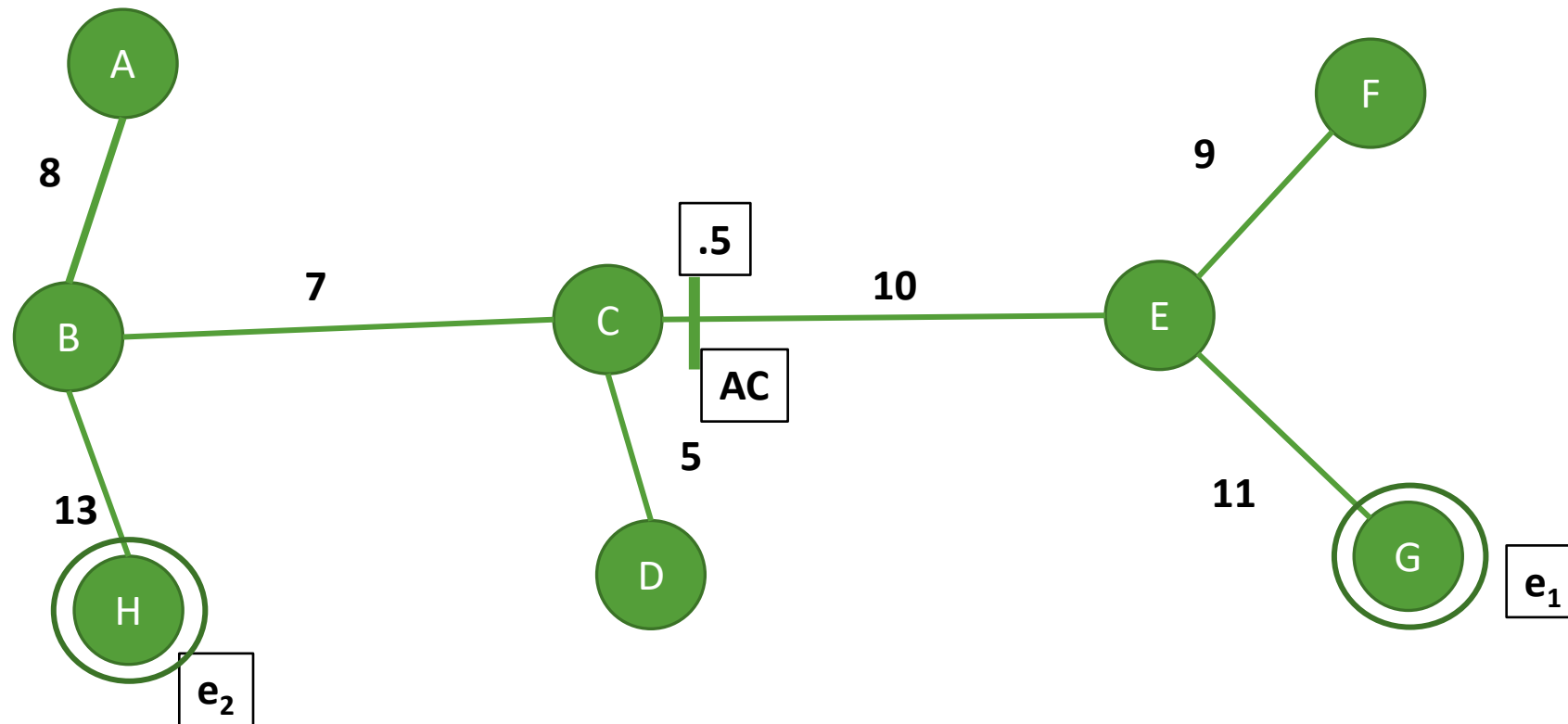
**Solve for the Absolute Center of each part independently**

- The Absolute Center of the Whole Tree is an extremum point ( $e1$ ) for both independent parts
- This makes the solution faster

**The two Absolute Centers of the independent parts comprise the 2-Center Solution for the whole**

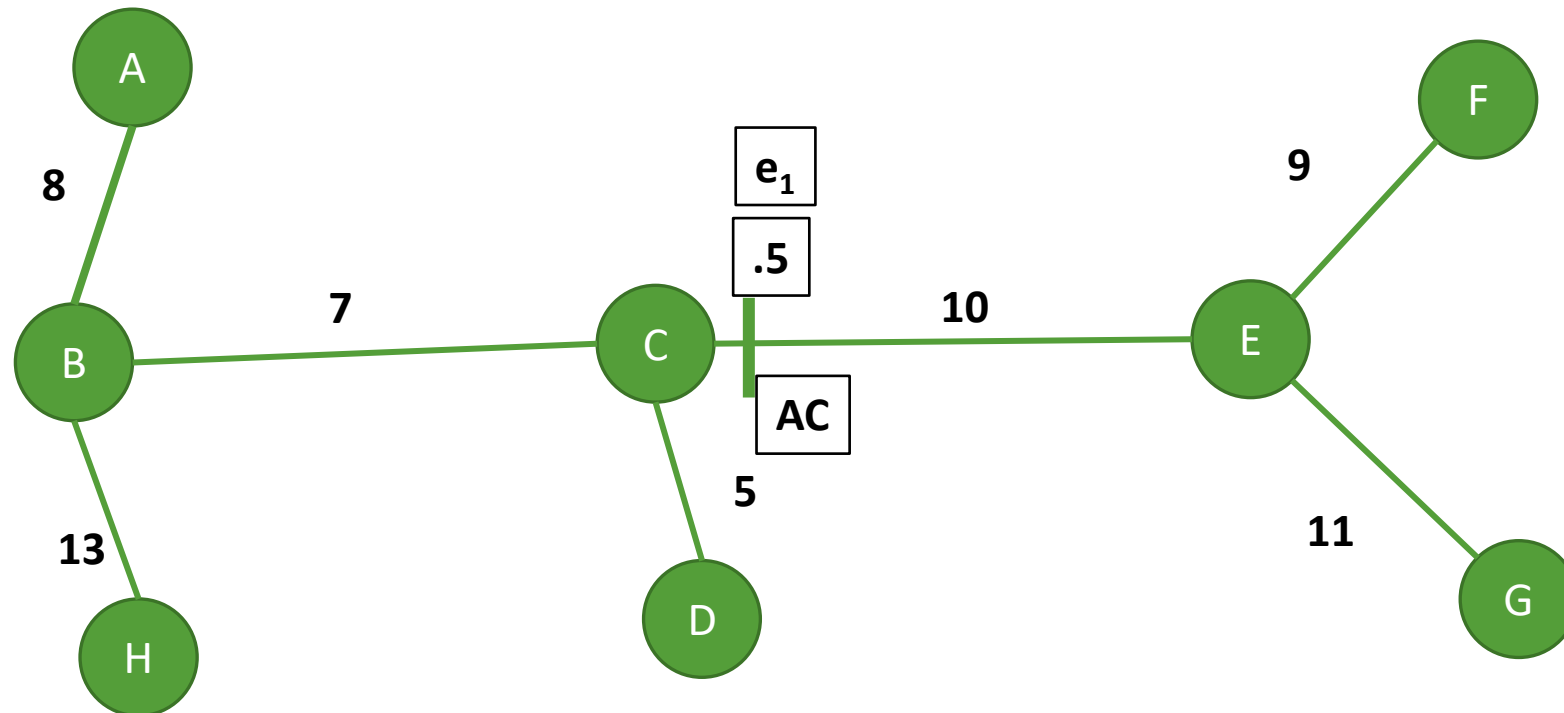
## 2 Center Example

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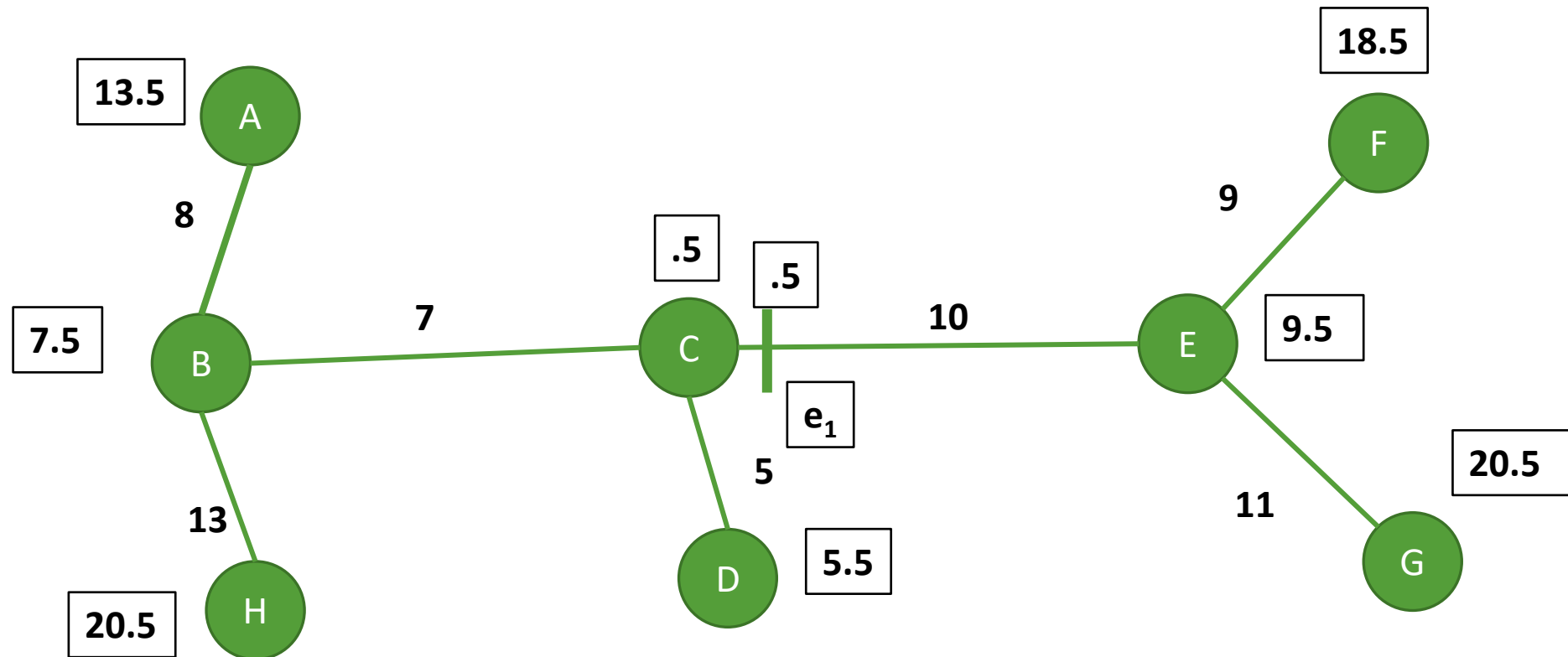


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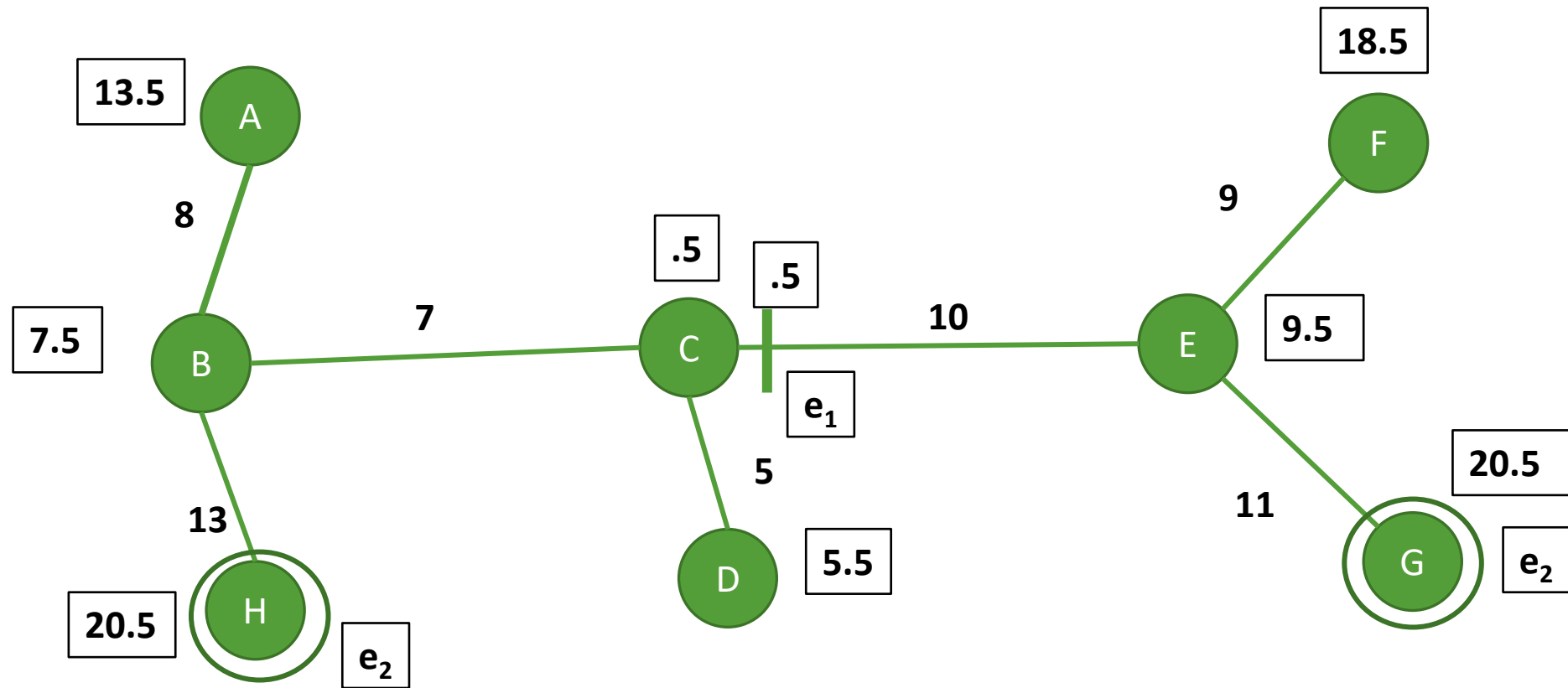
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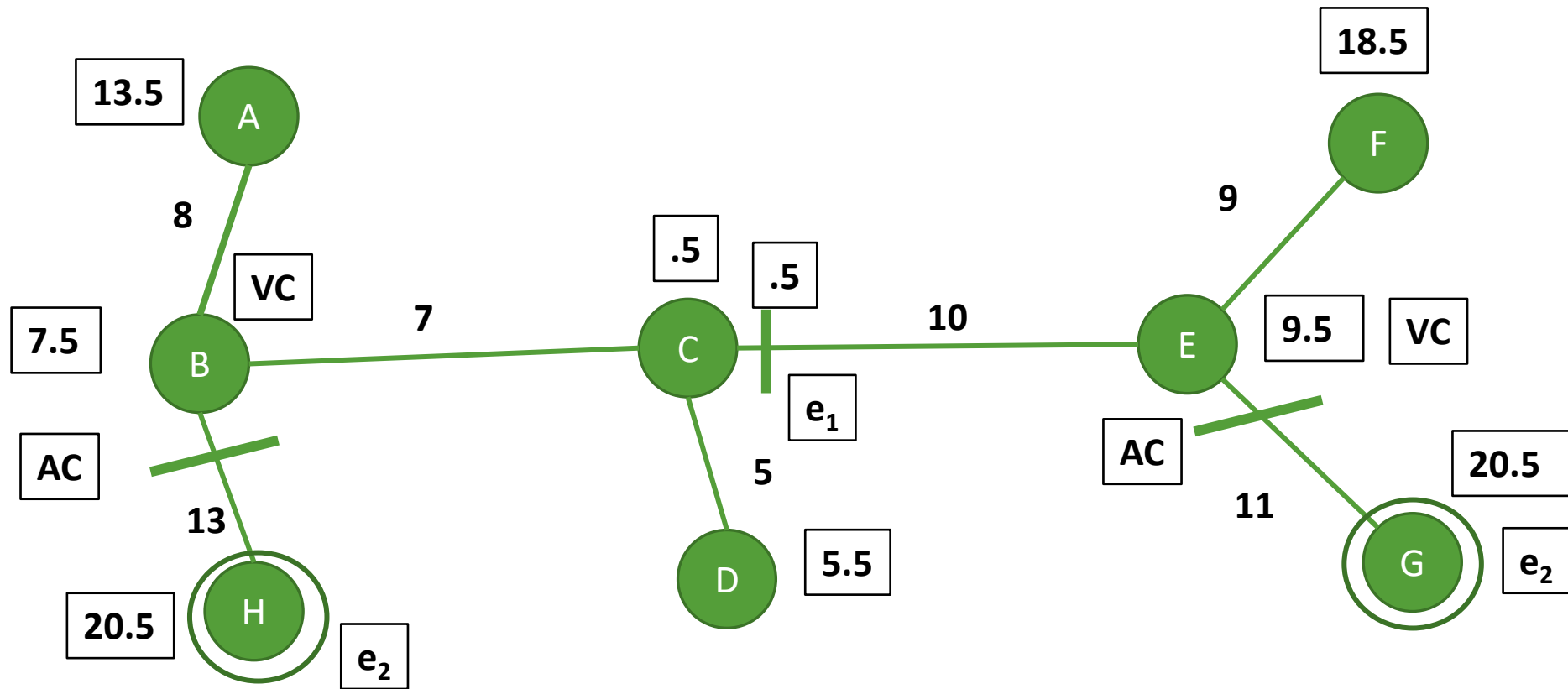
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