

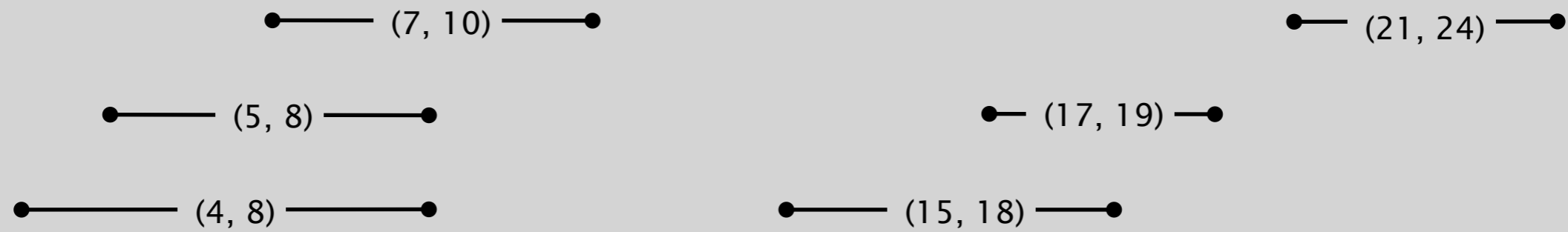
INTERVAL SEARCH TREE DEMO



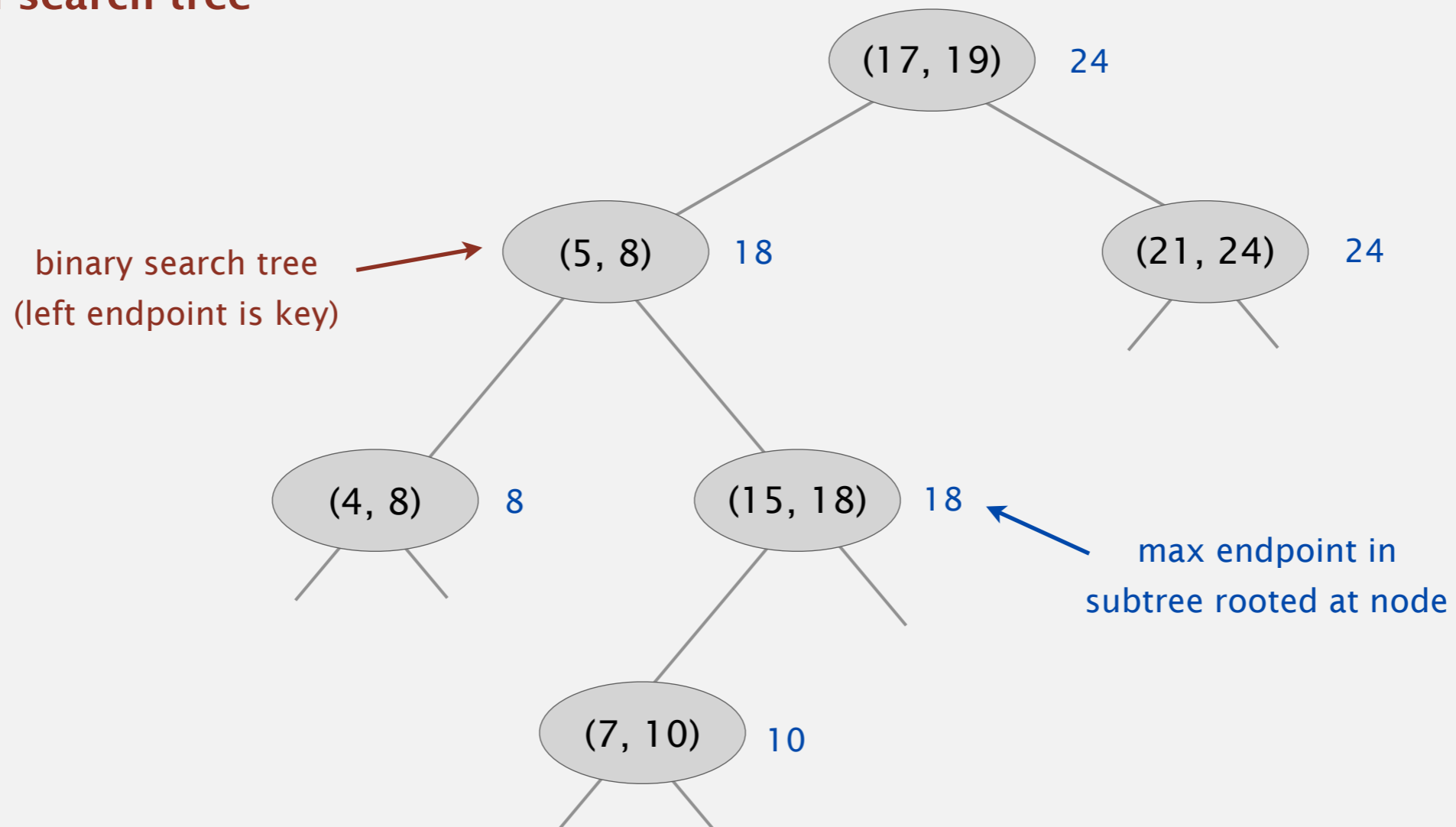
- ▶ interval insertion
- ▶ interval intersection search

click to begin demo

Interval search trees



interval search tree



▶ **interval insertion**

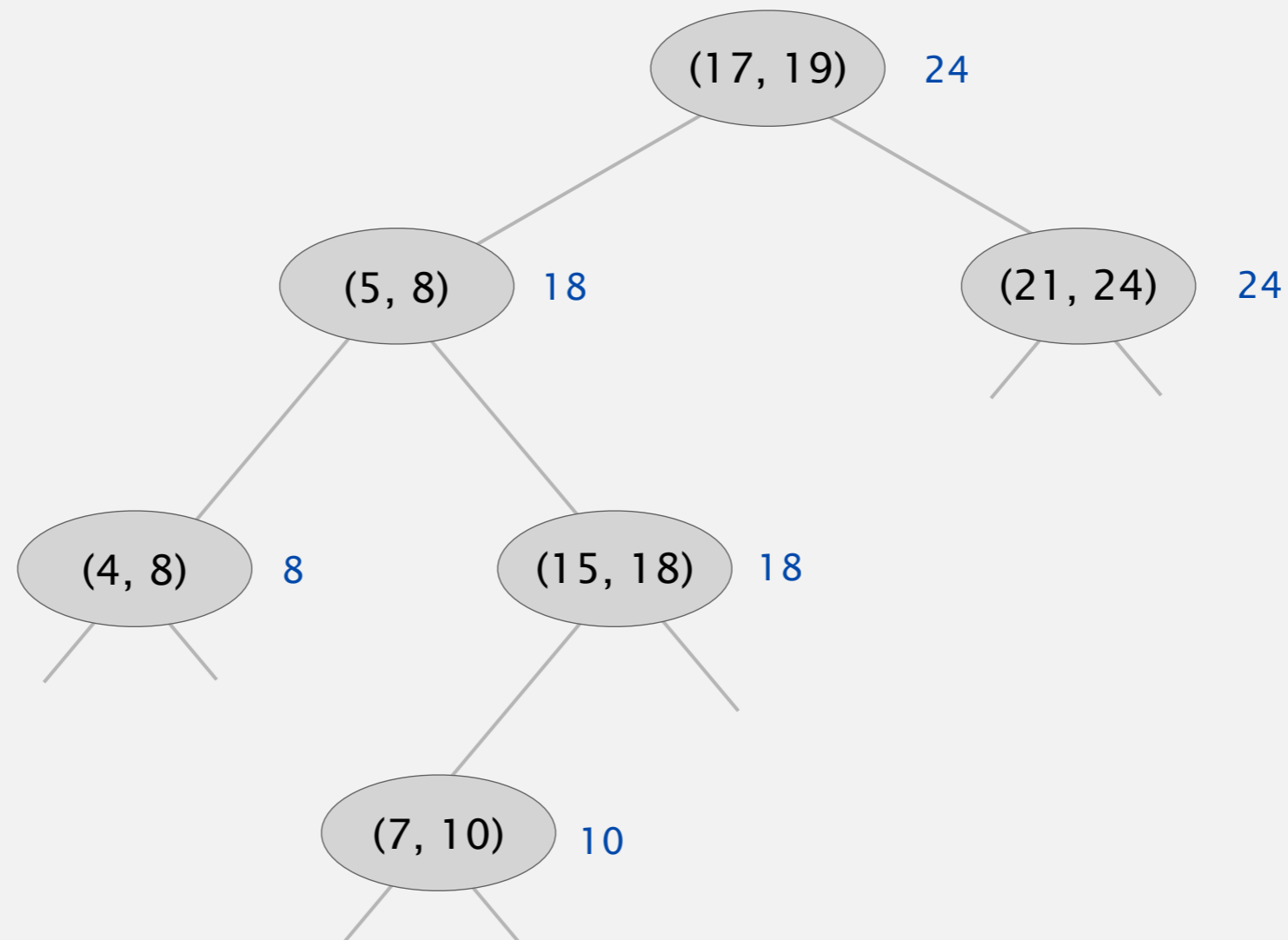
▶ interval intersection search

Inserting an interval

To insert an interval (lo, hi) :

- Insert into BST, using lo as the key.
- Update max in each node on search path.

insert interval (16, 22)

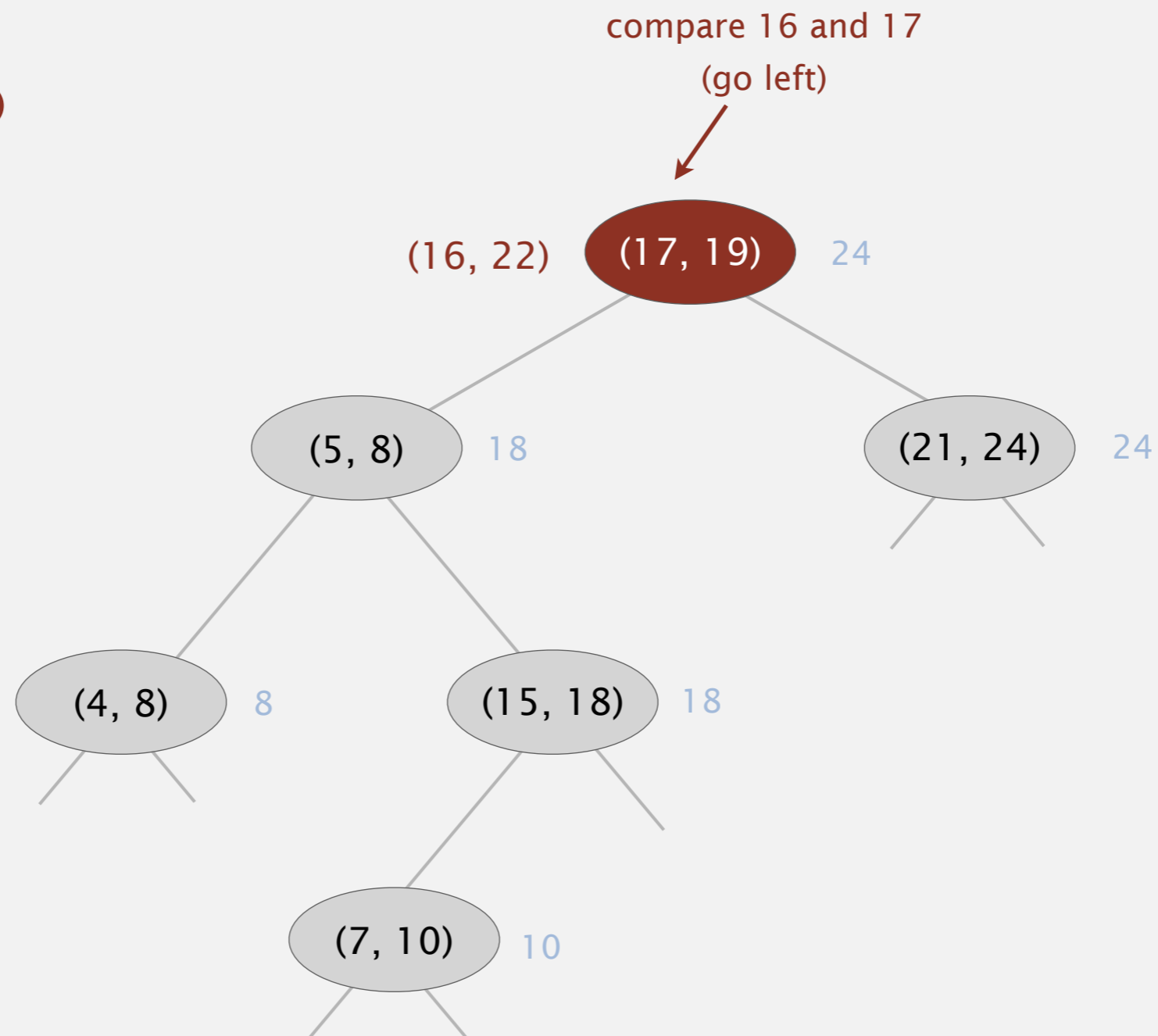


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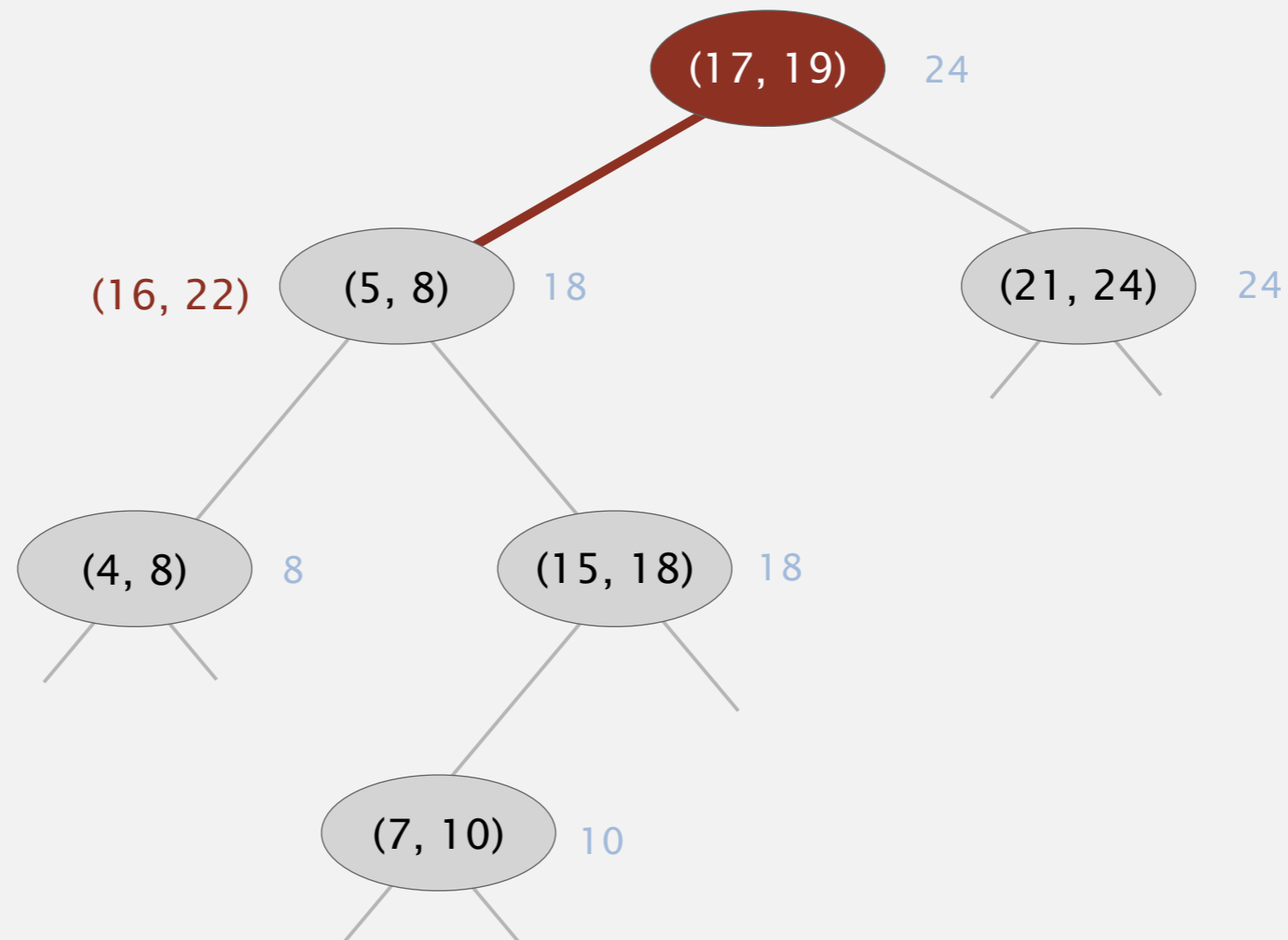


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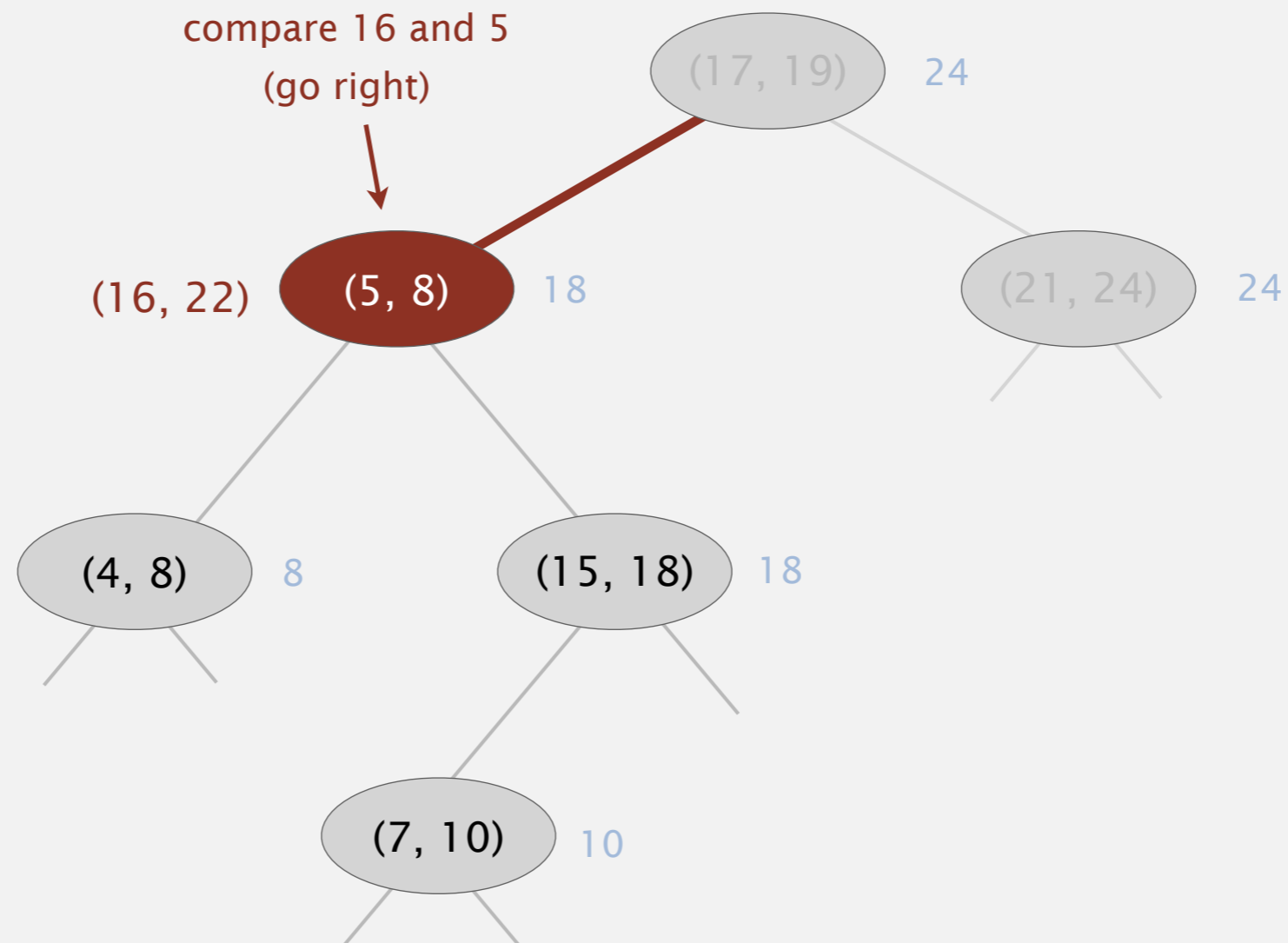


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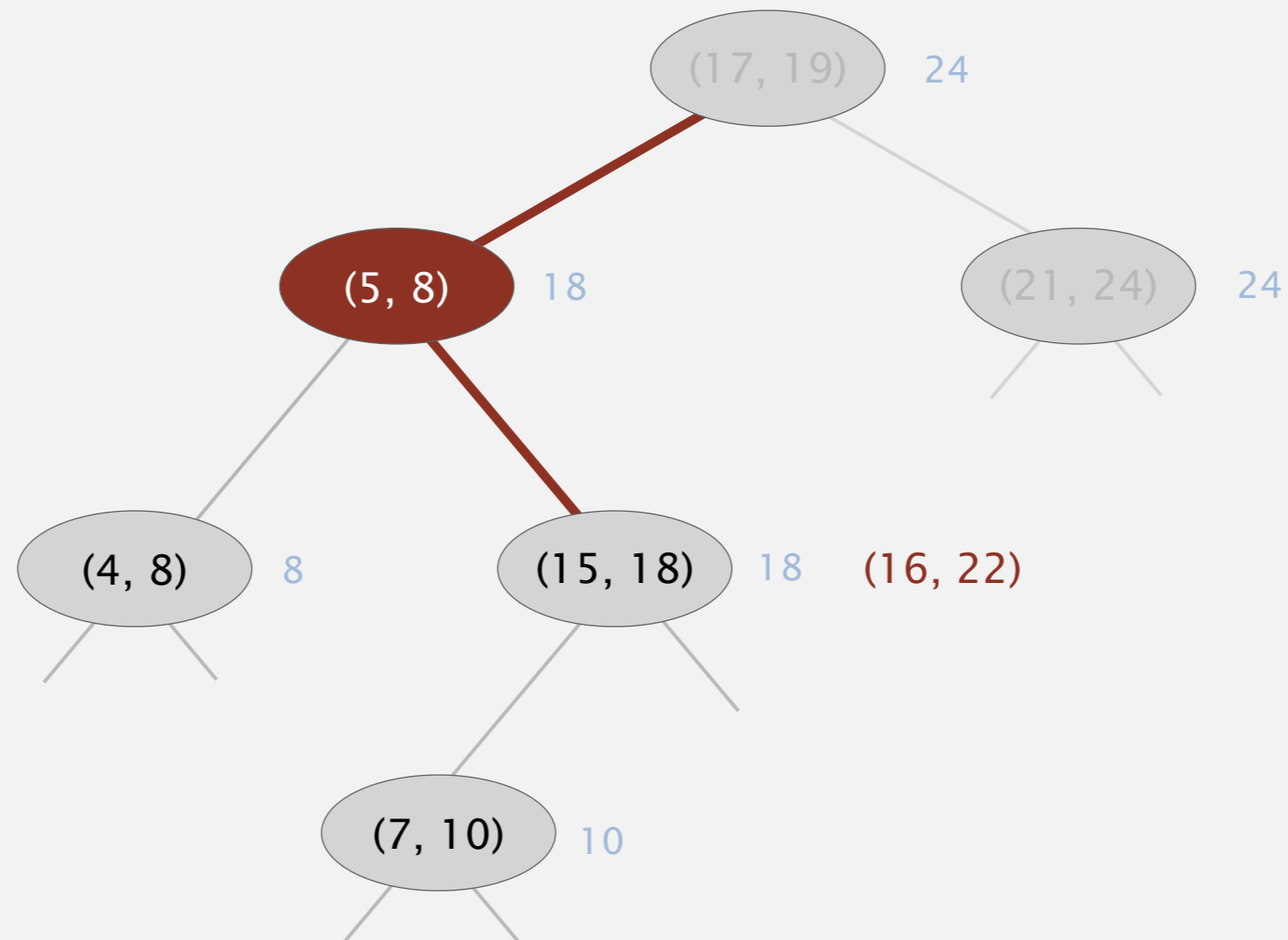


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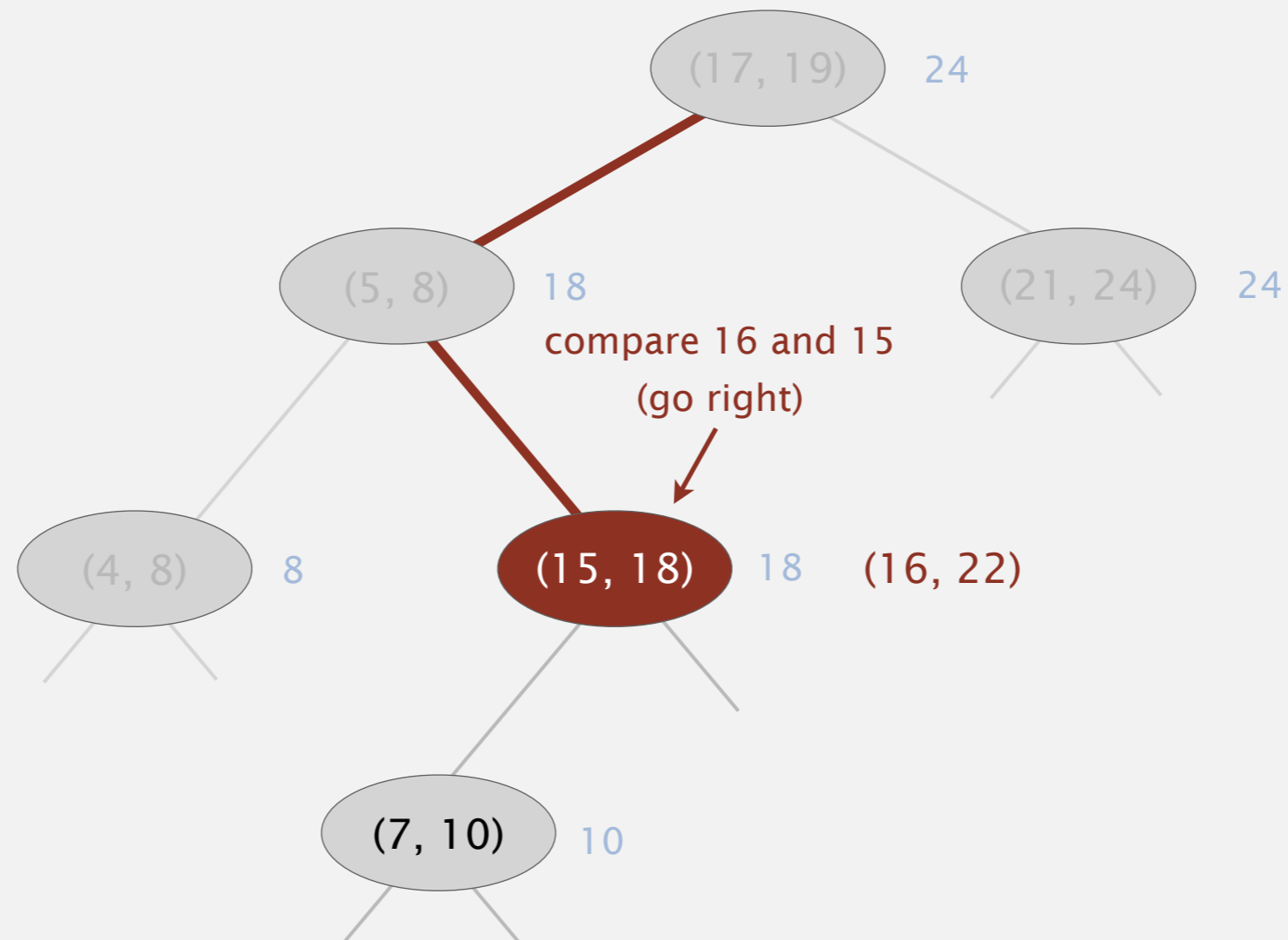


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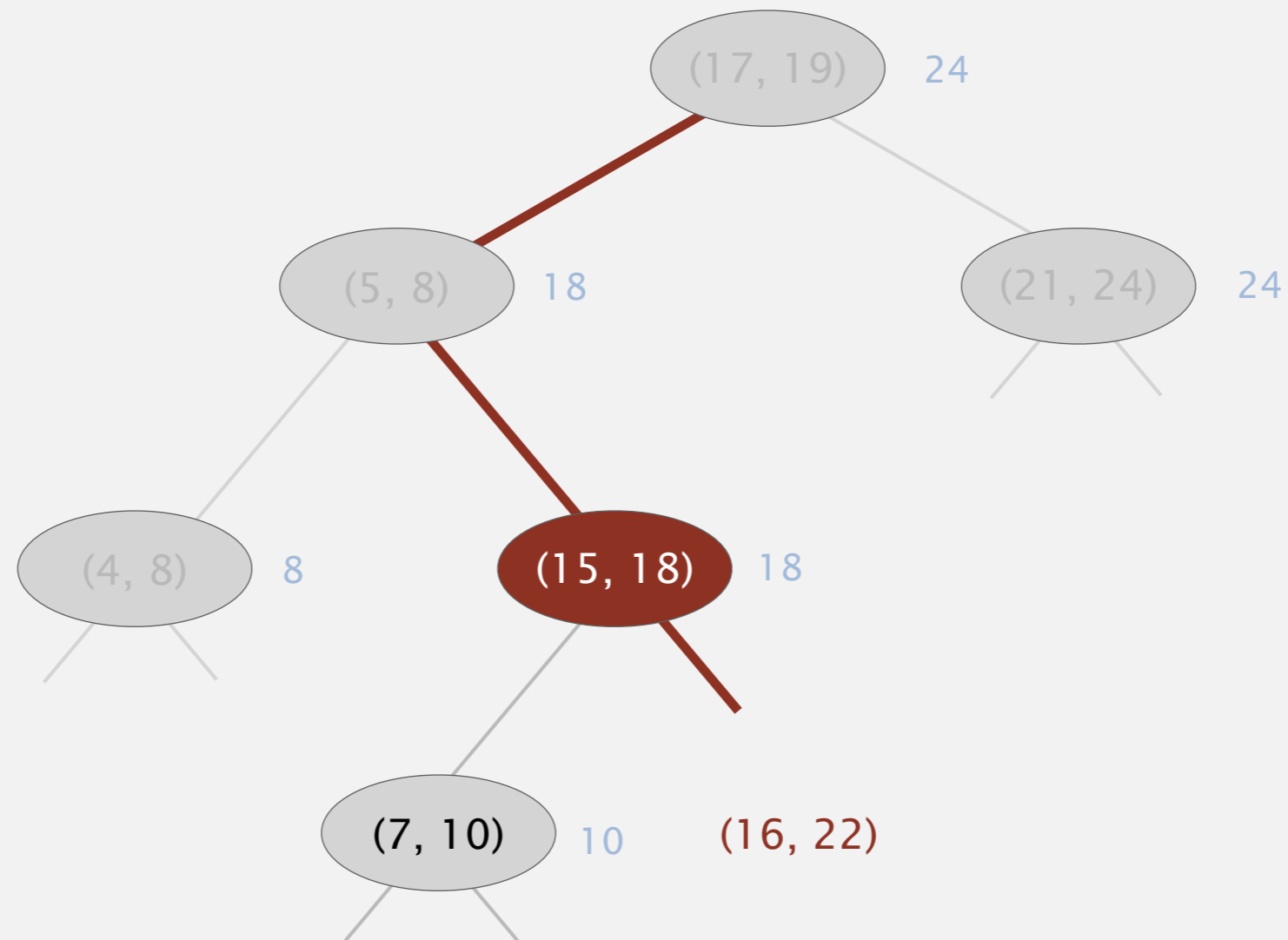


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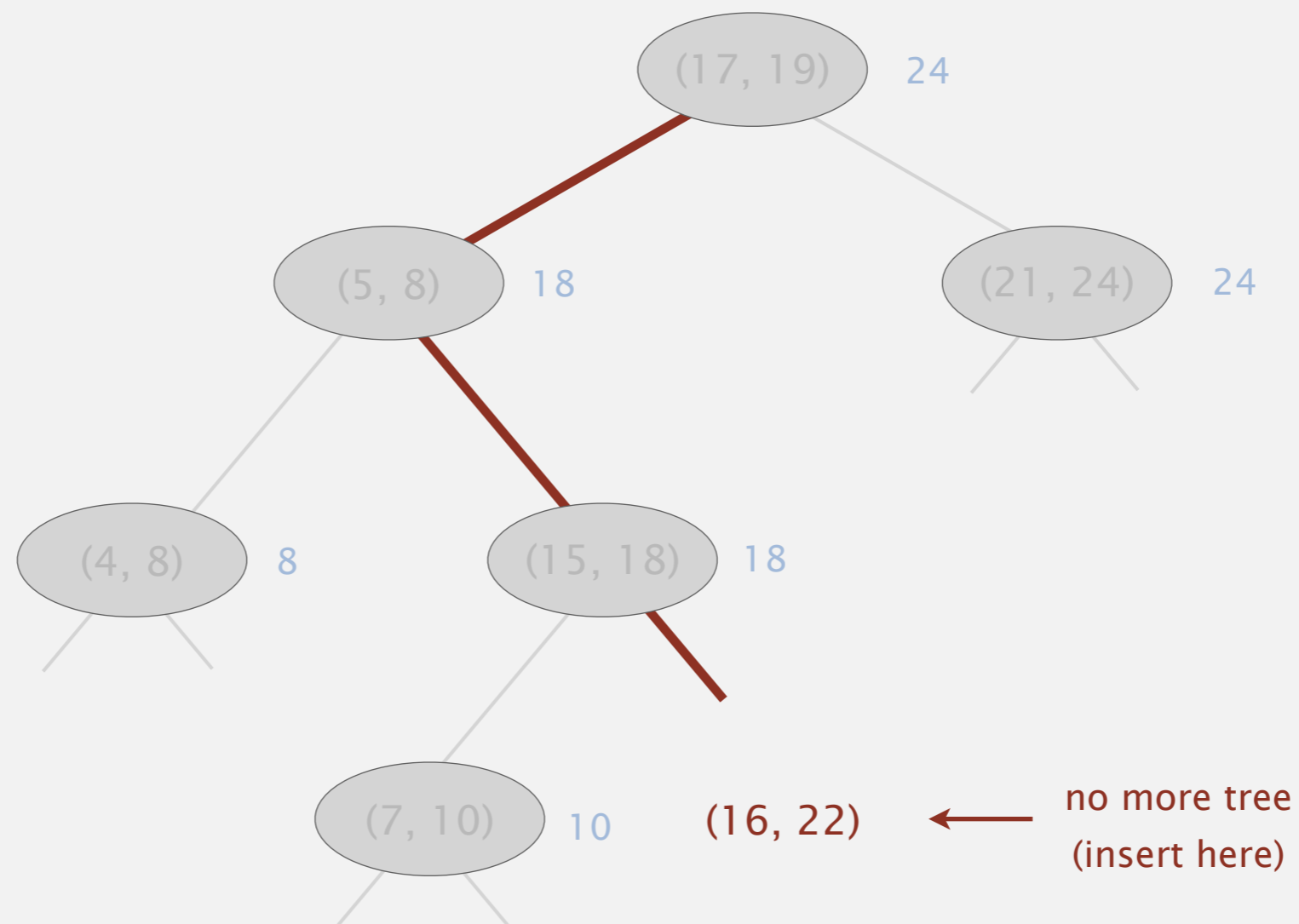


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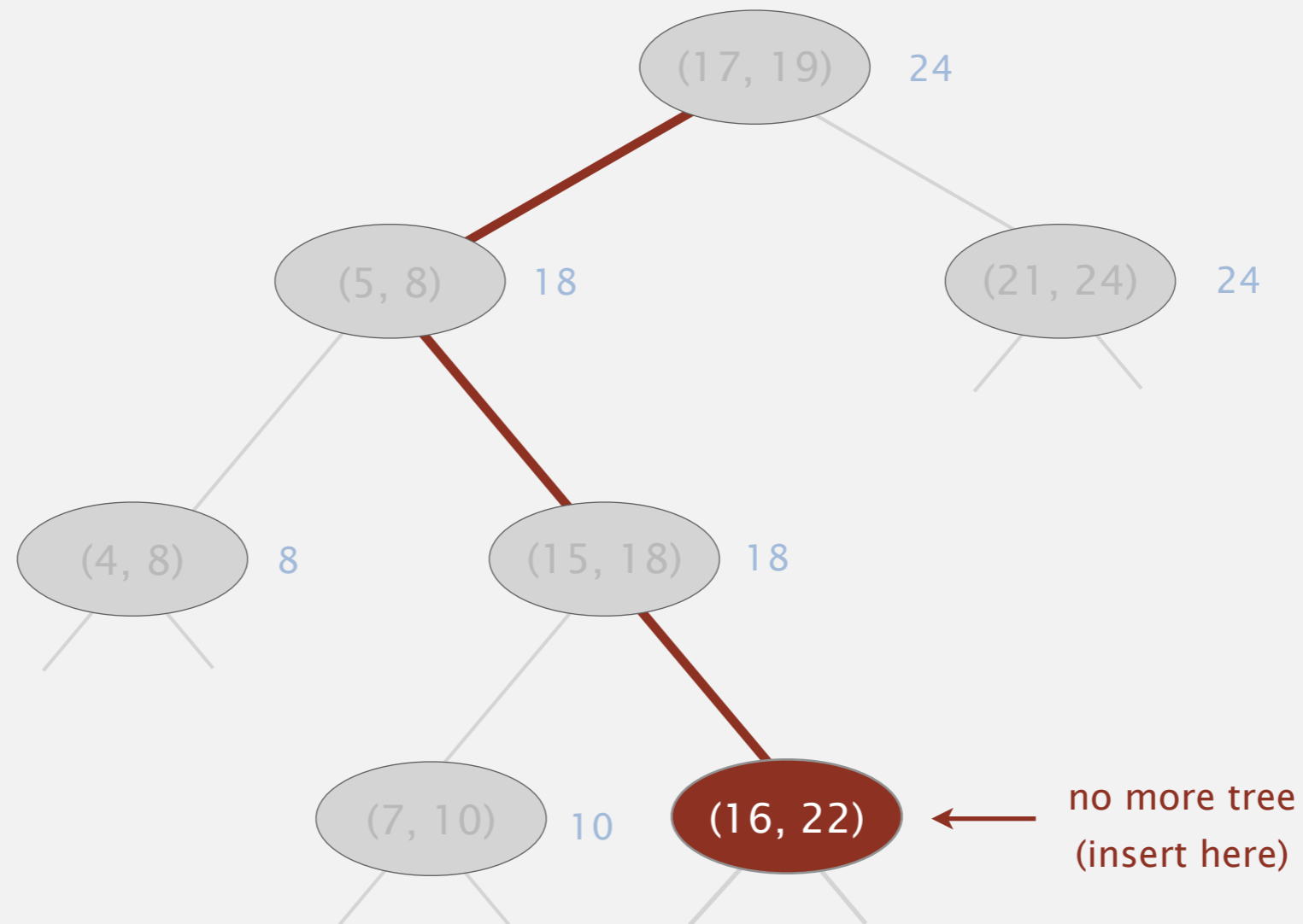


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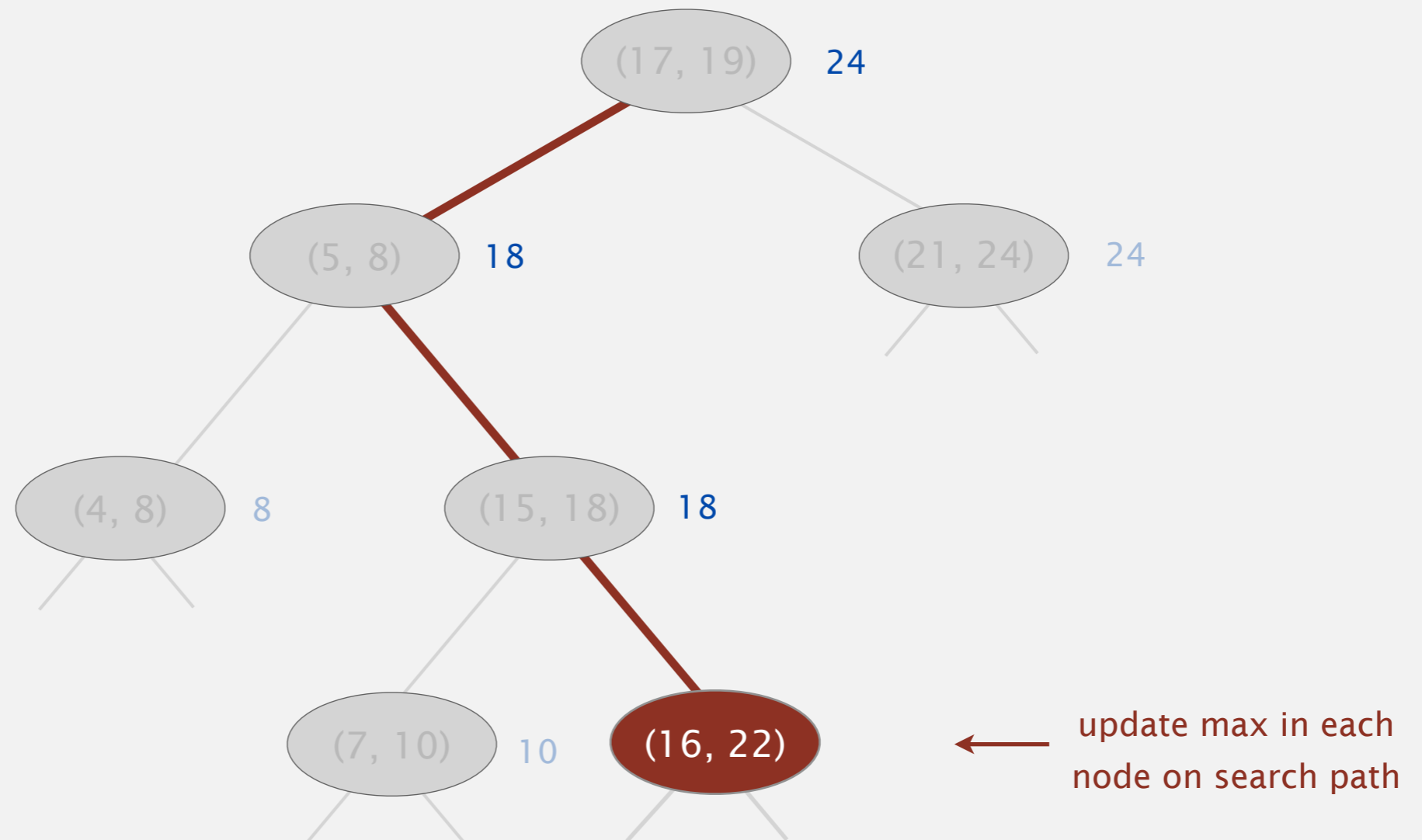


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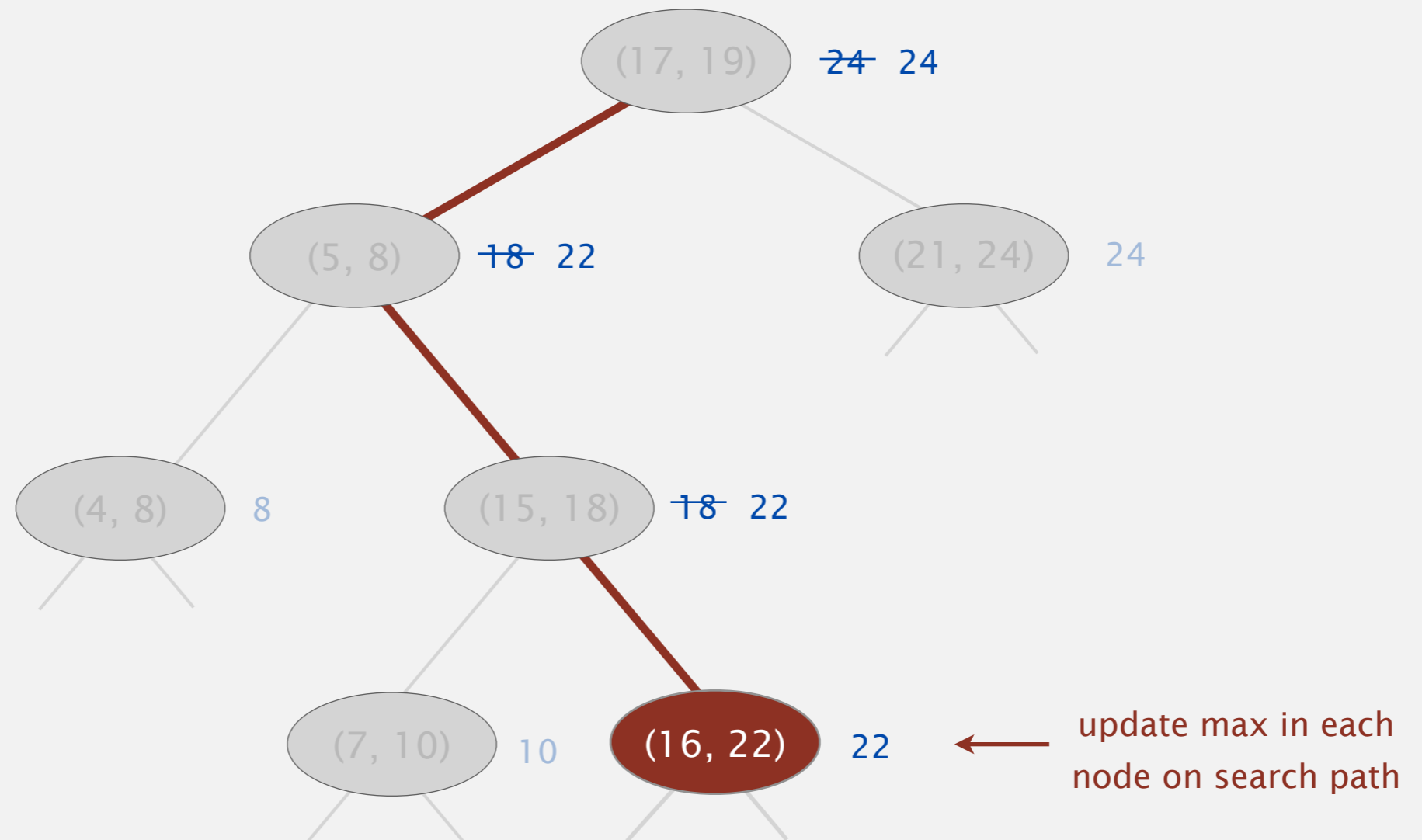


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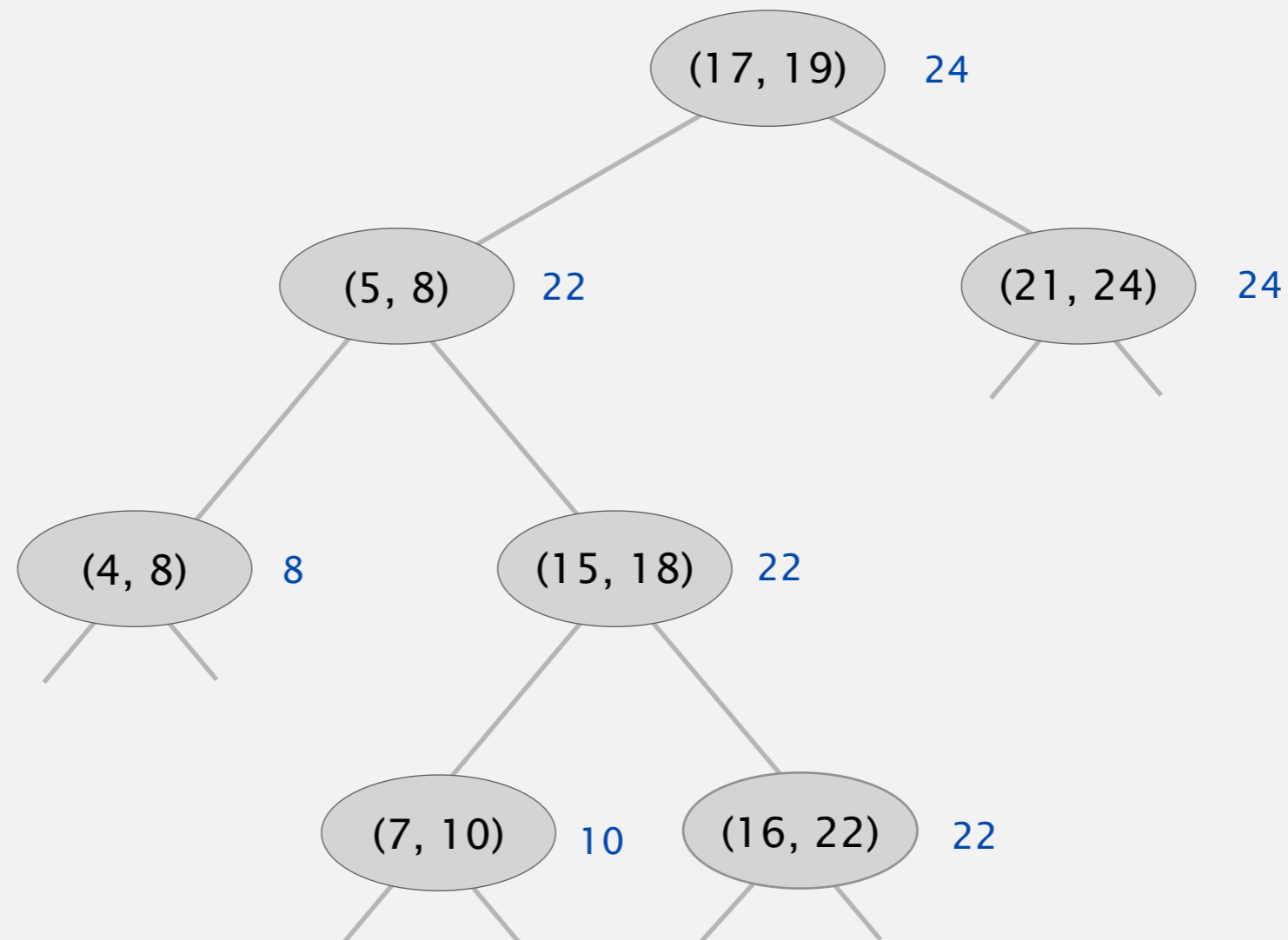


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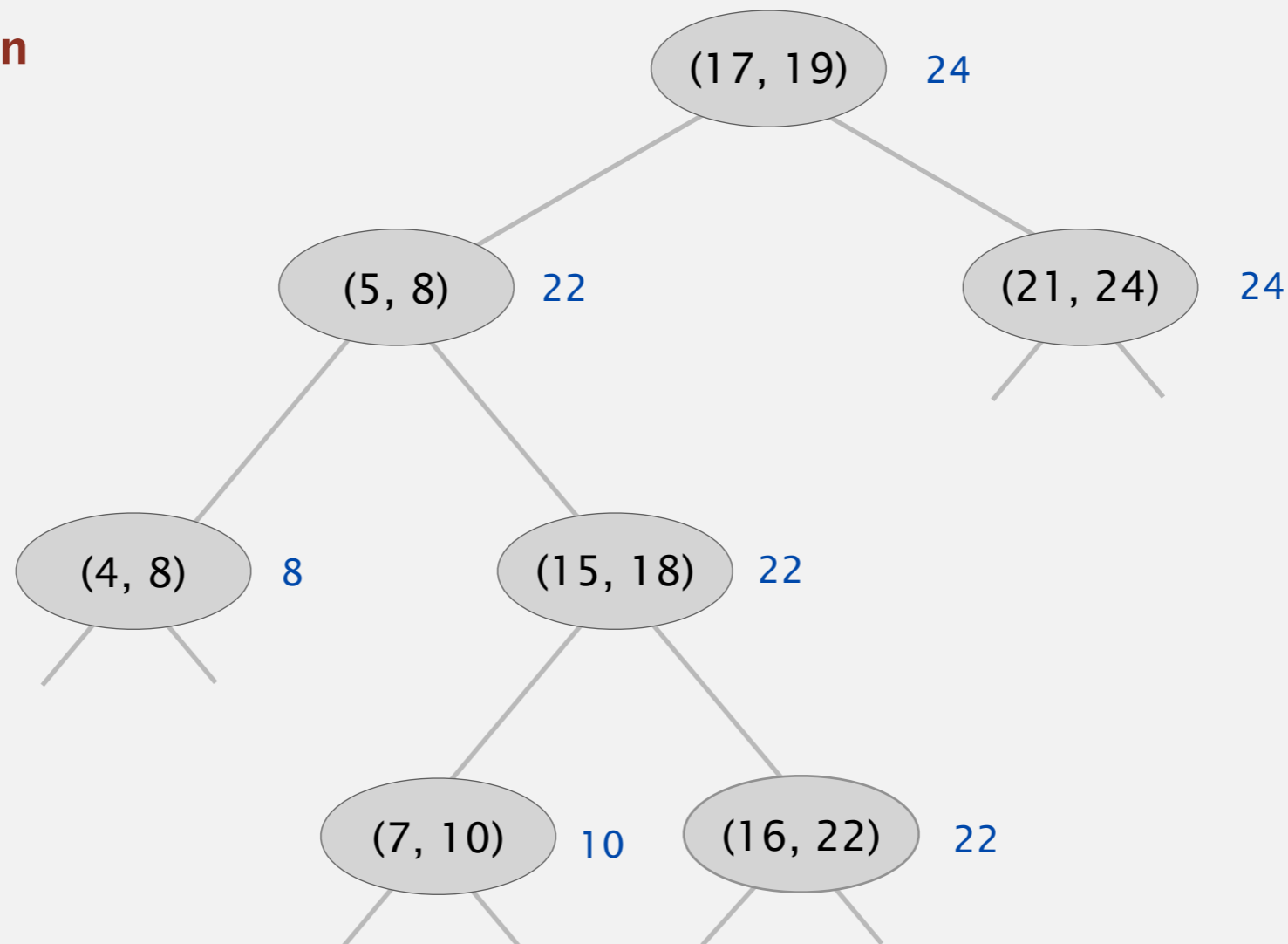
- ▶ interval insertion
- ▶ **interval intersection search**

Search for an intersecting interval

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**interval intersection
search for (23, 25)**

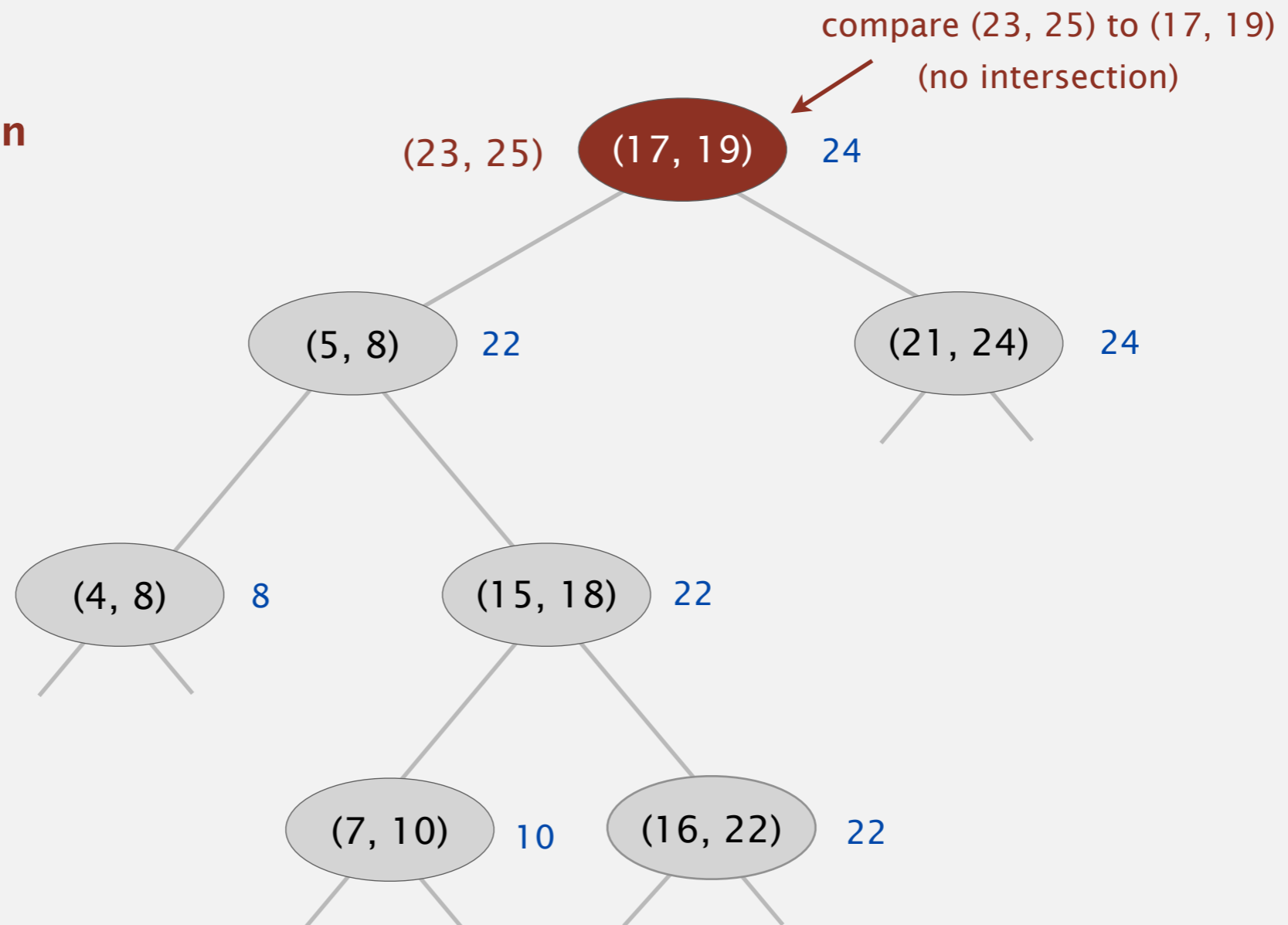


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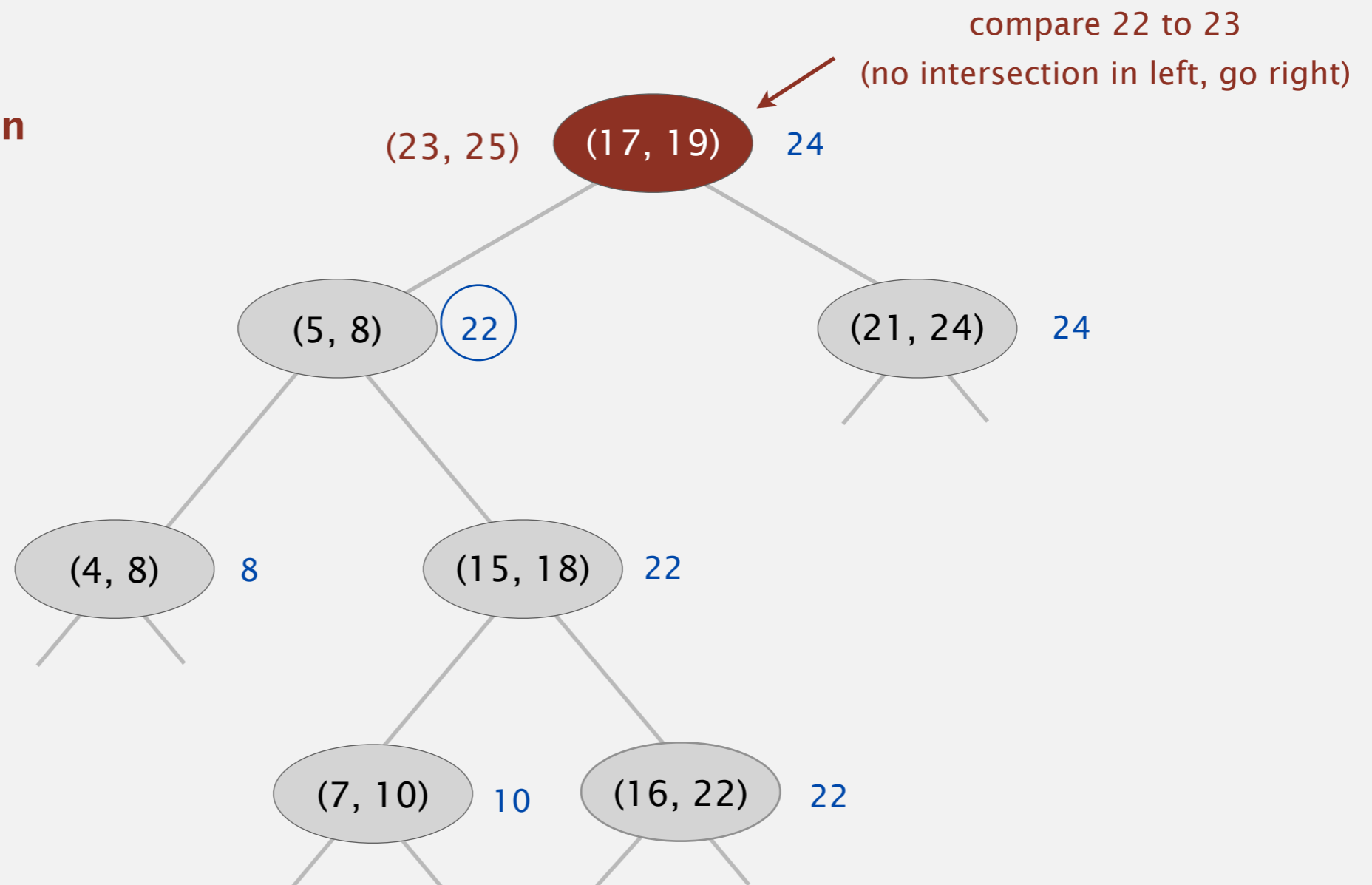


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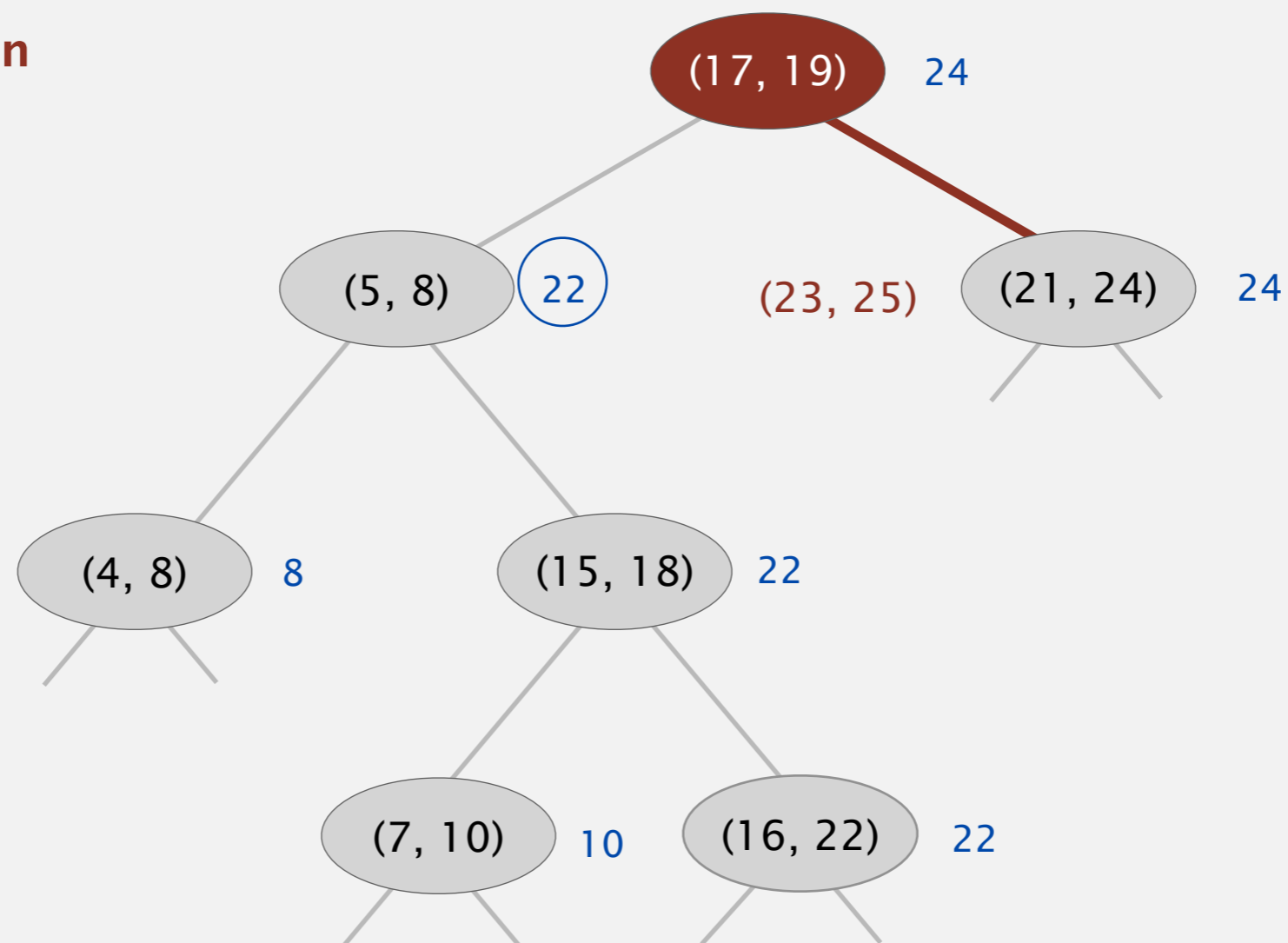


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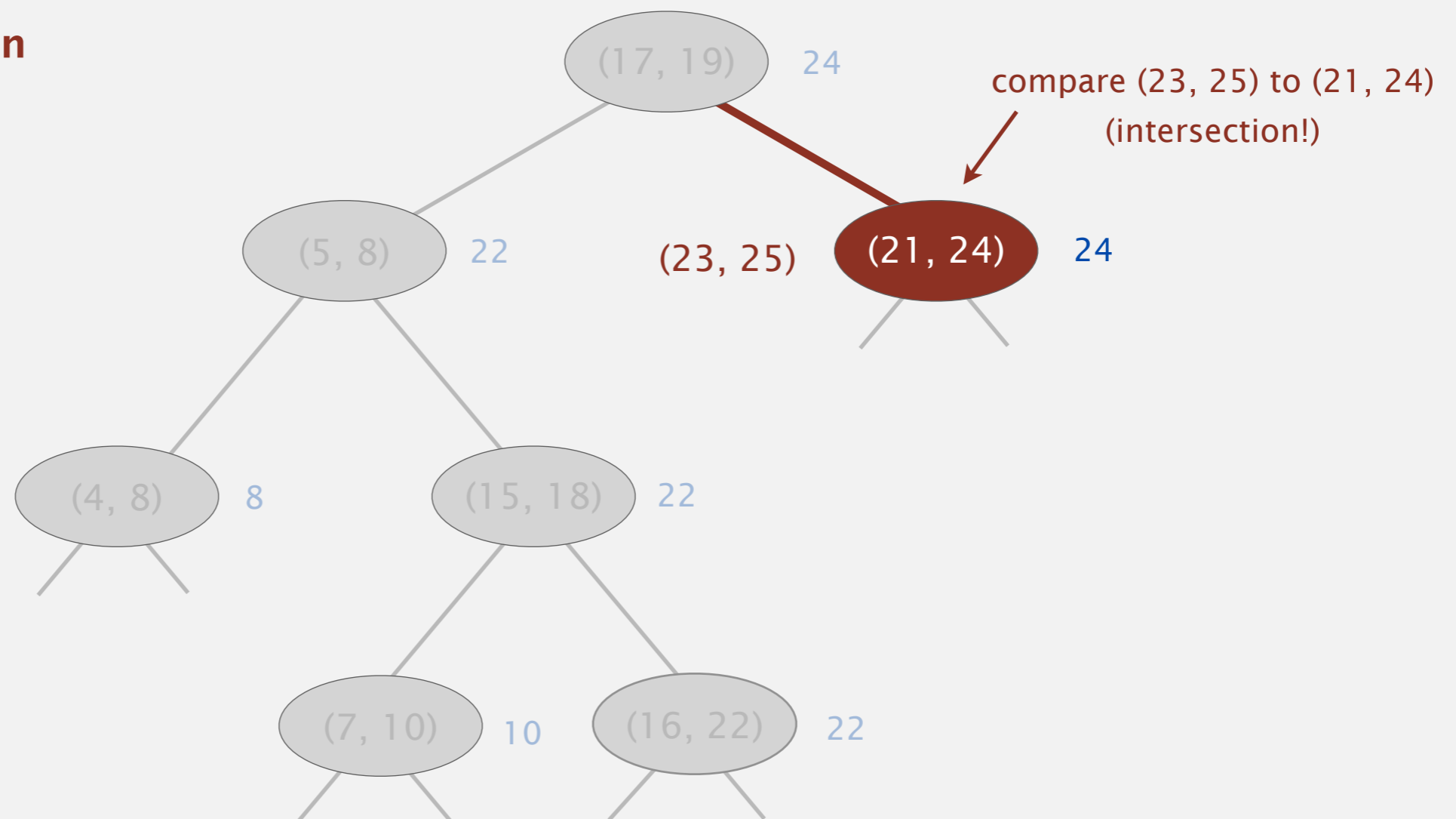


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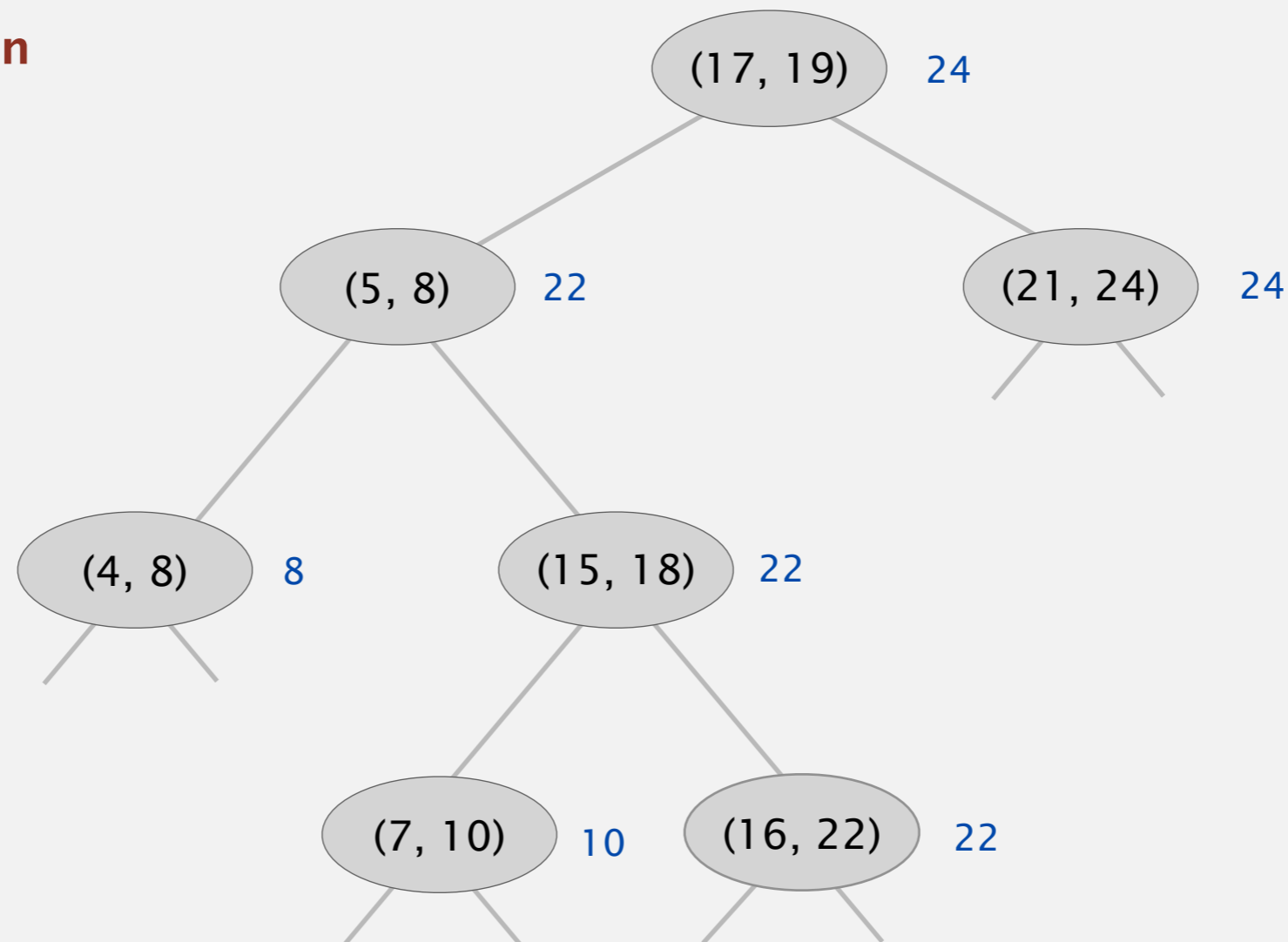


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**interval intersection
search for (12, 14)**

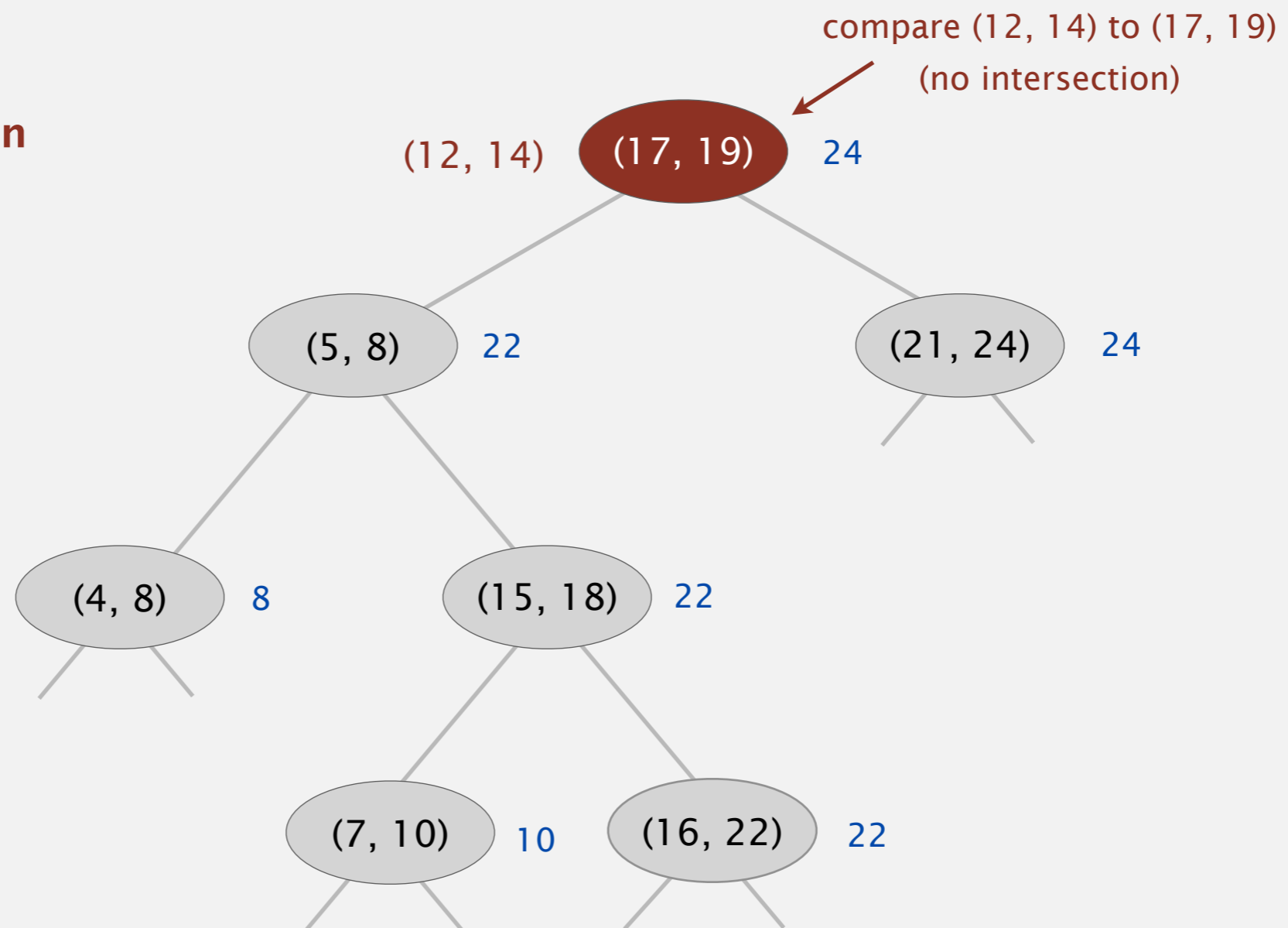


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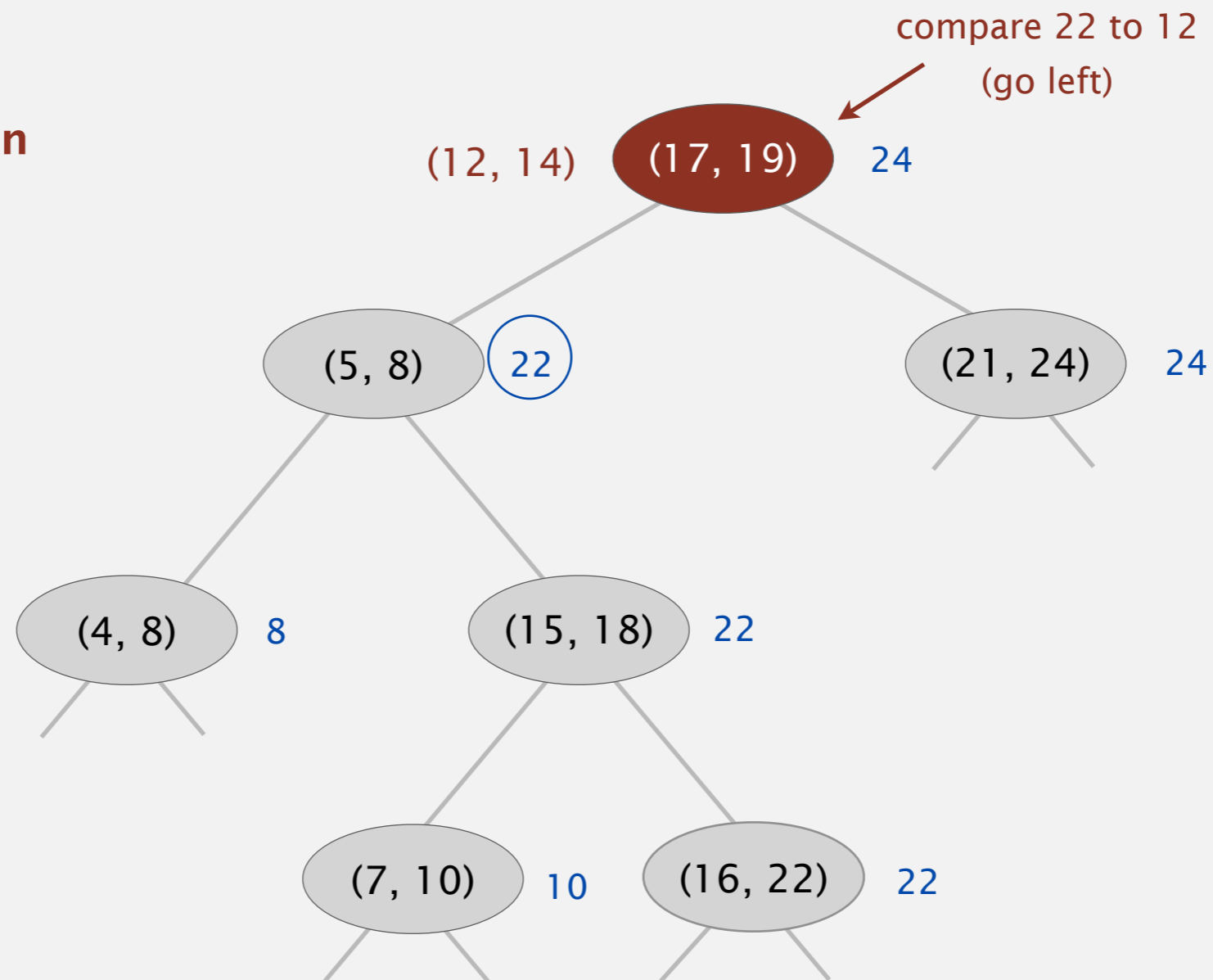


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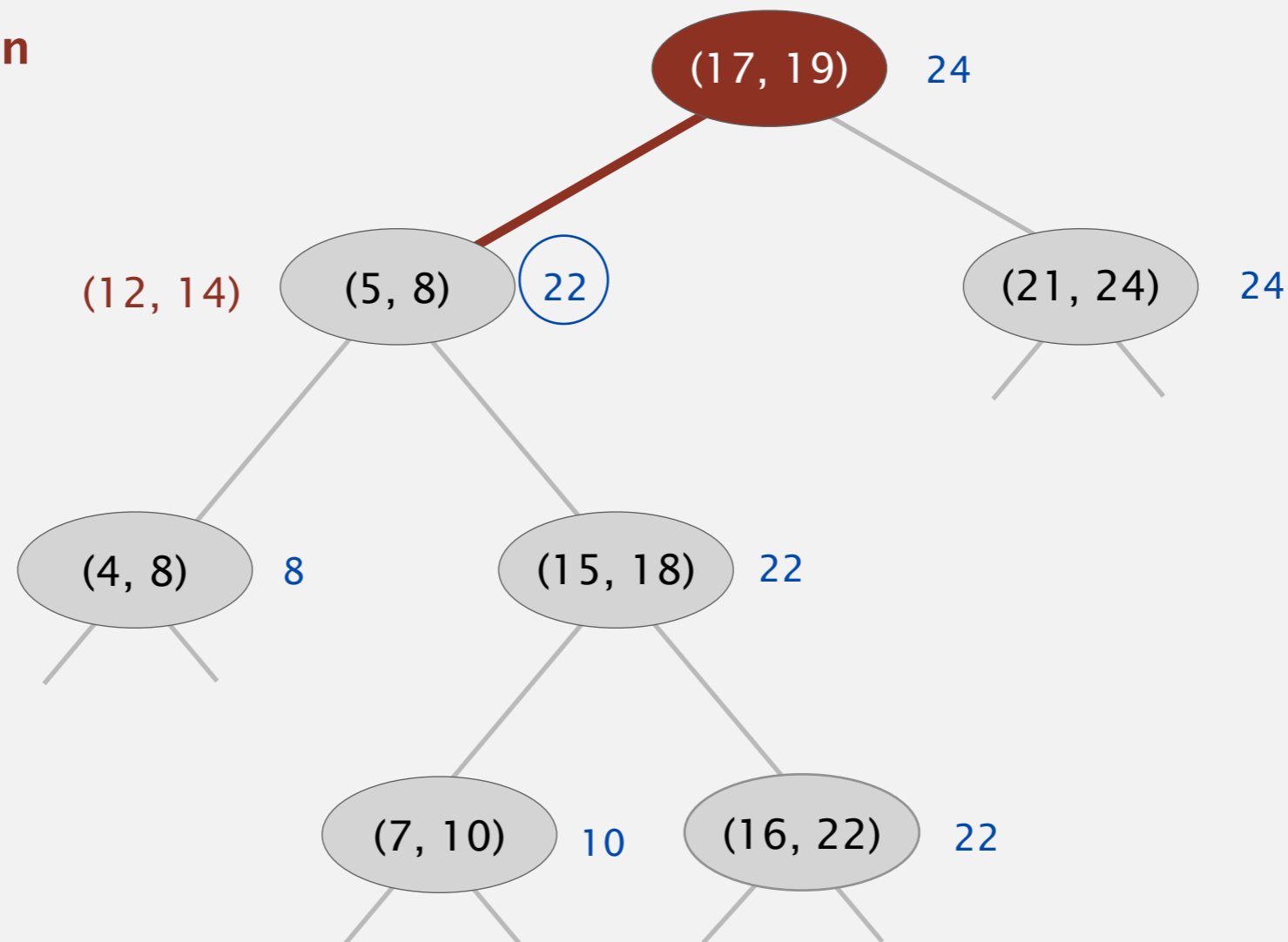


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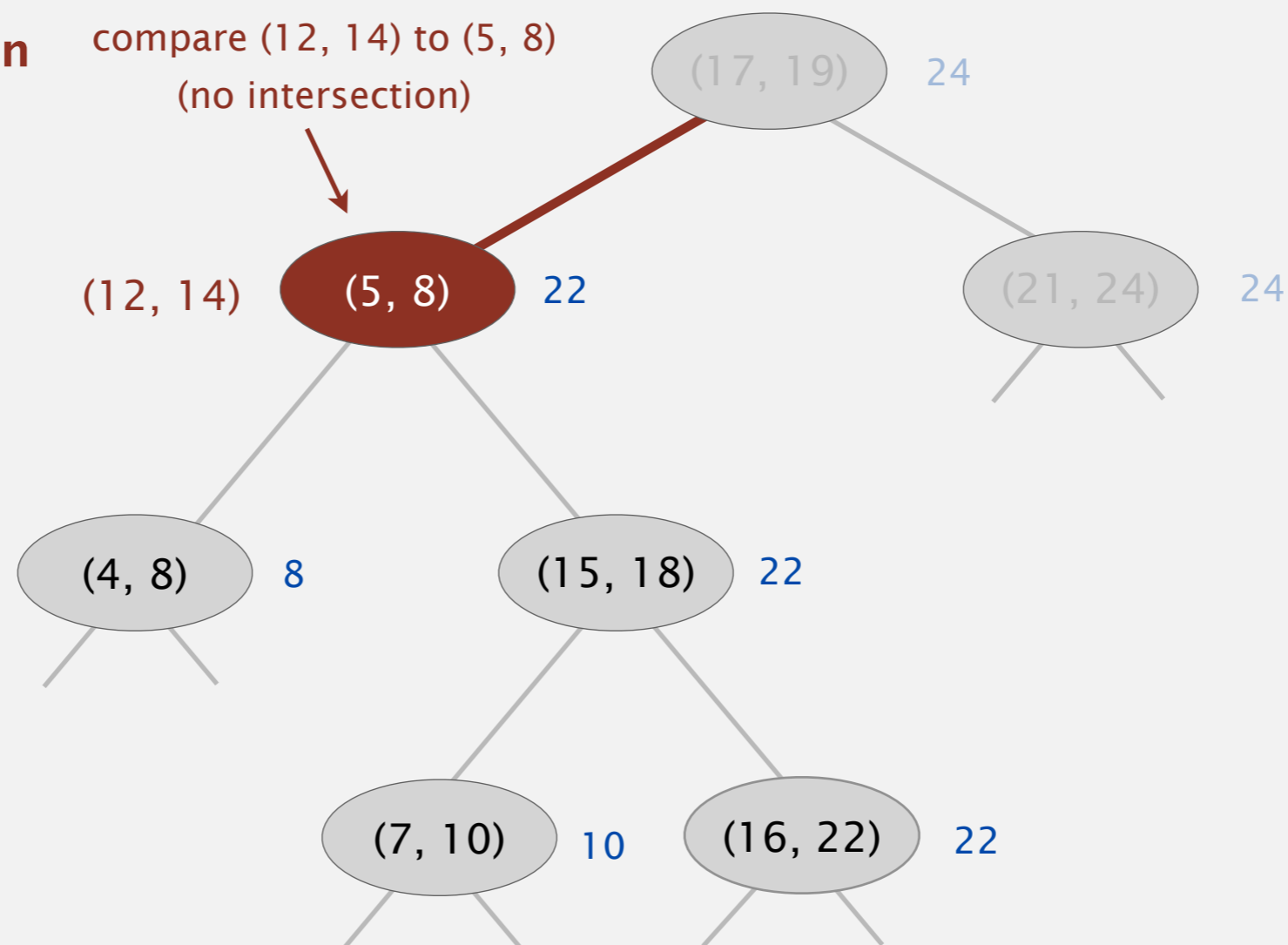


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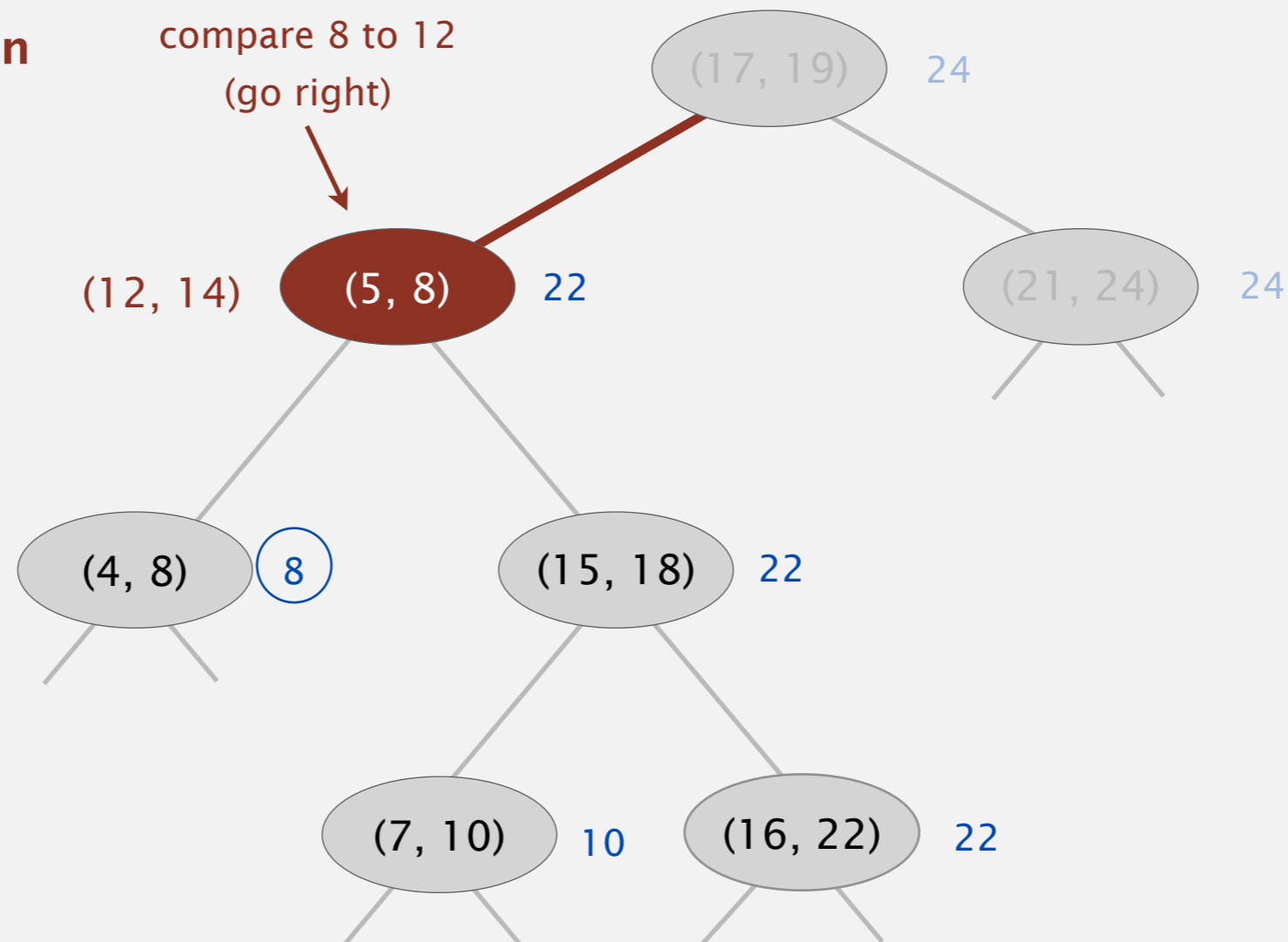


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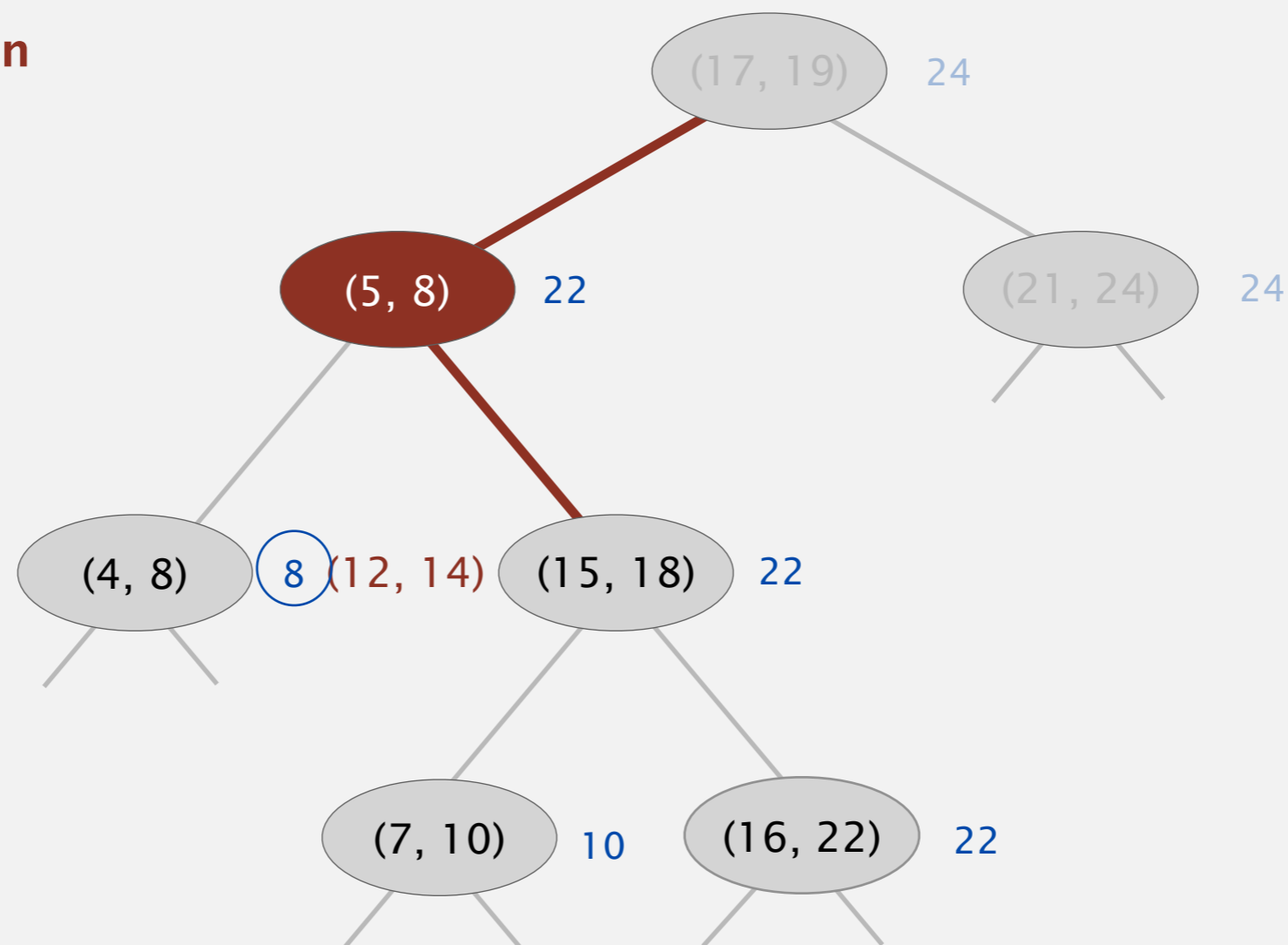


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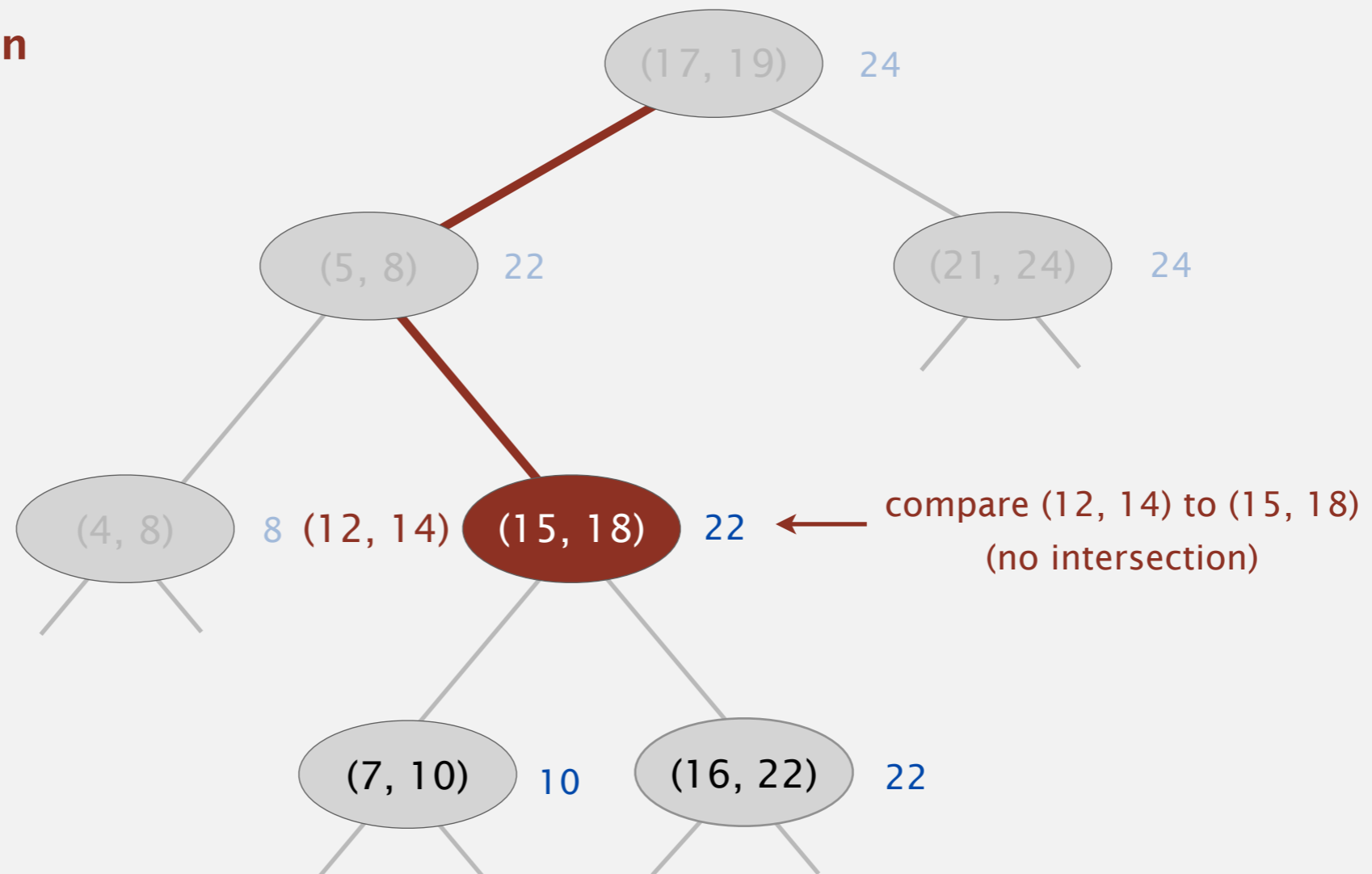


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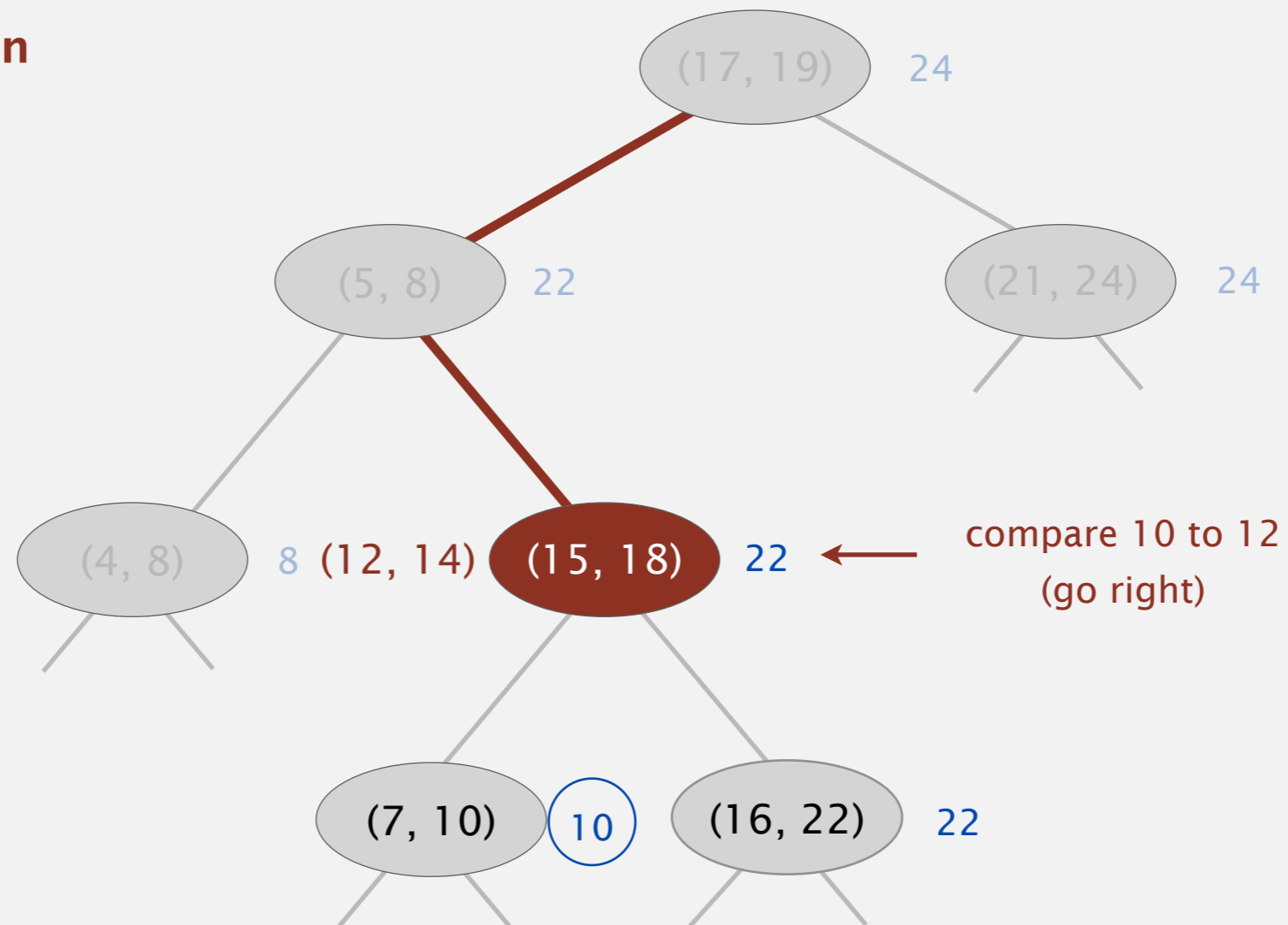


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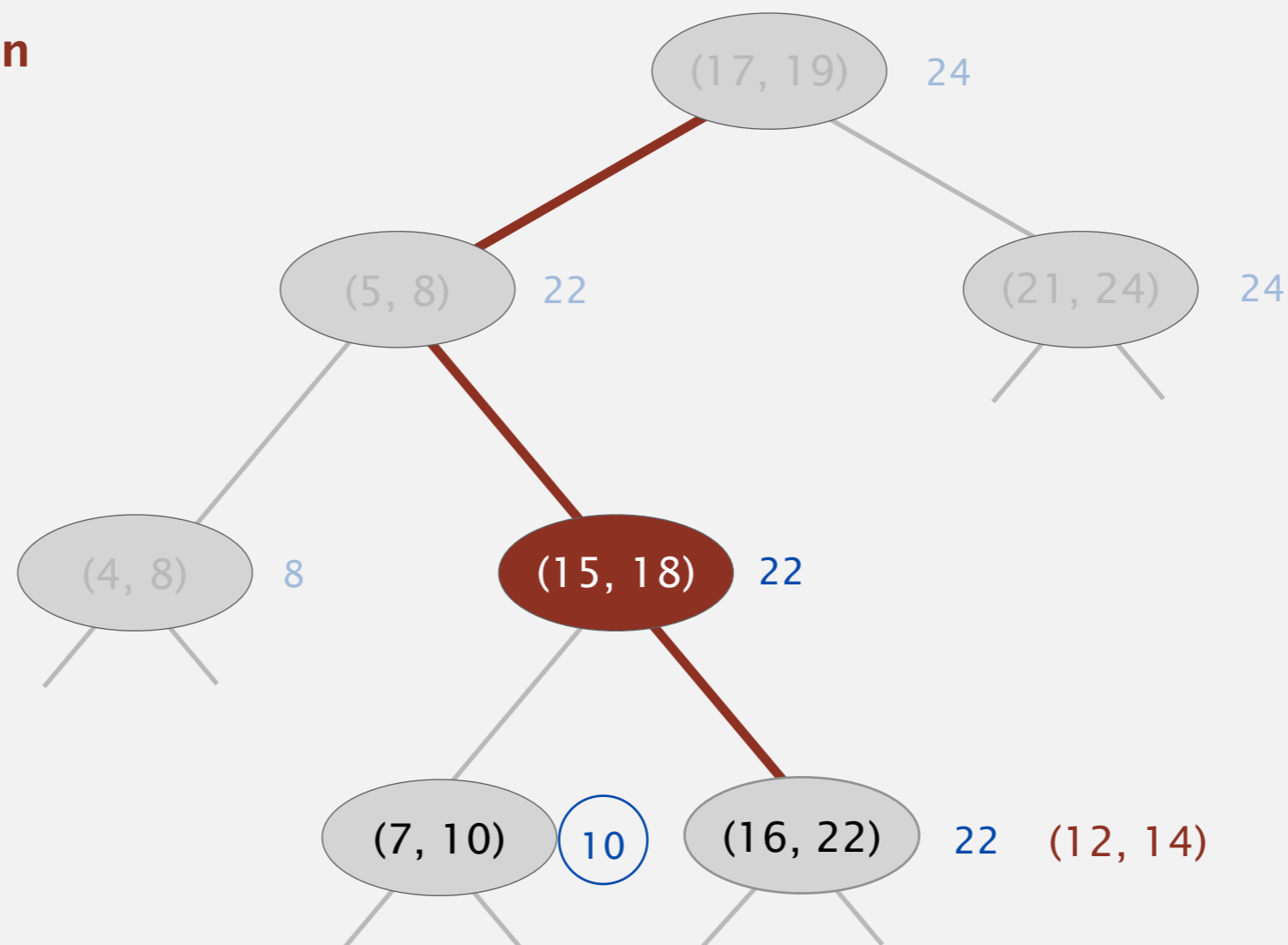


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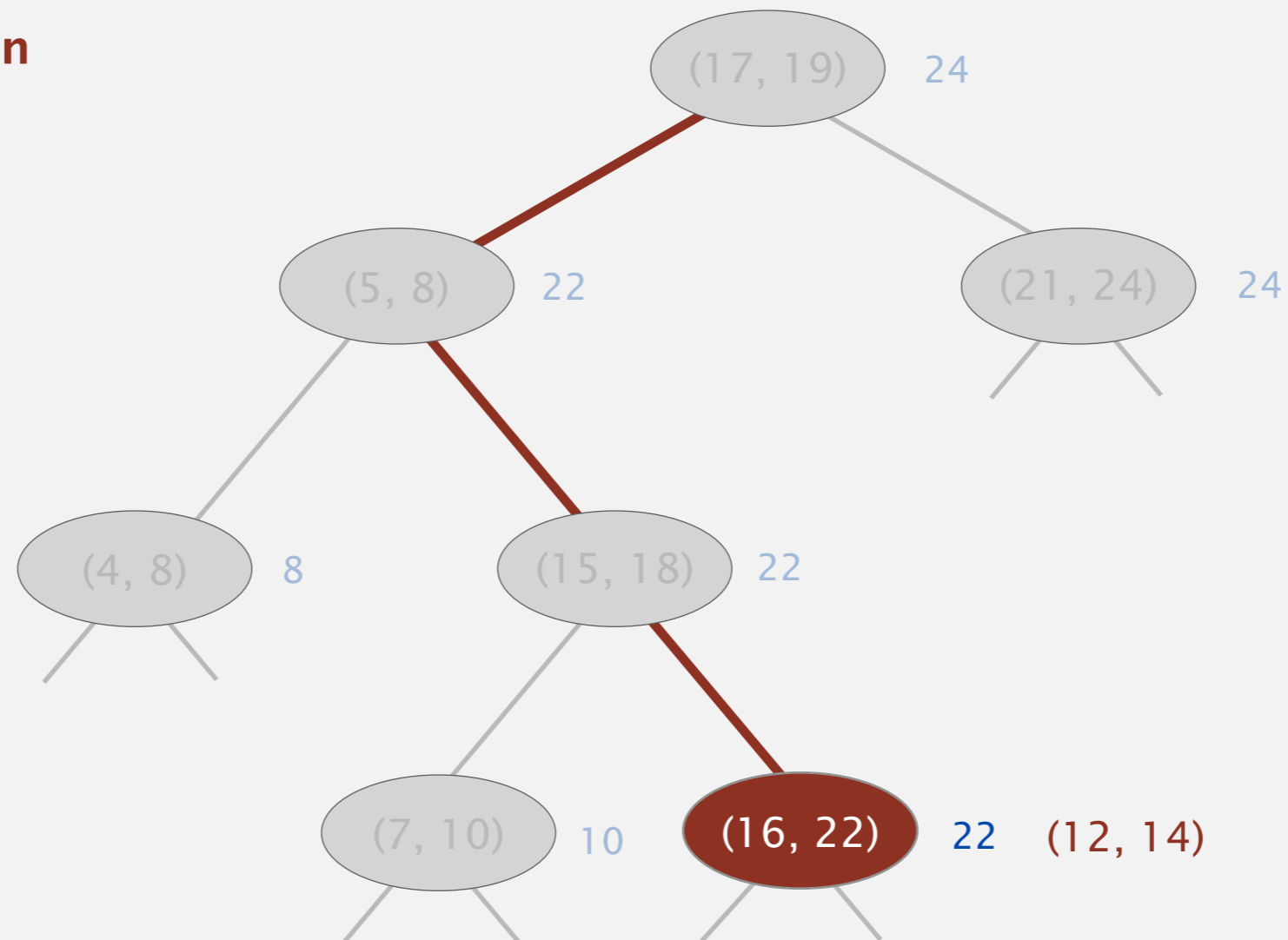


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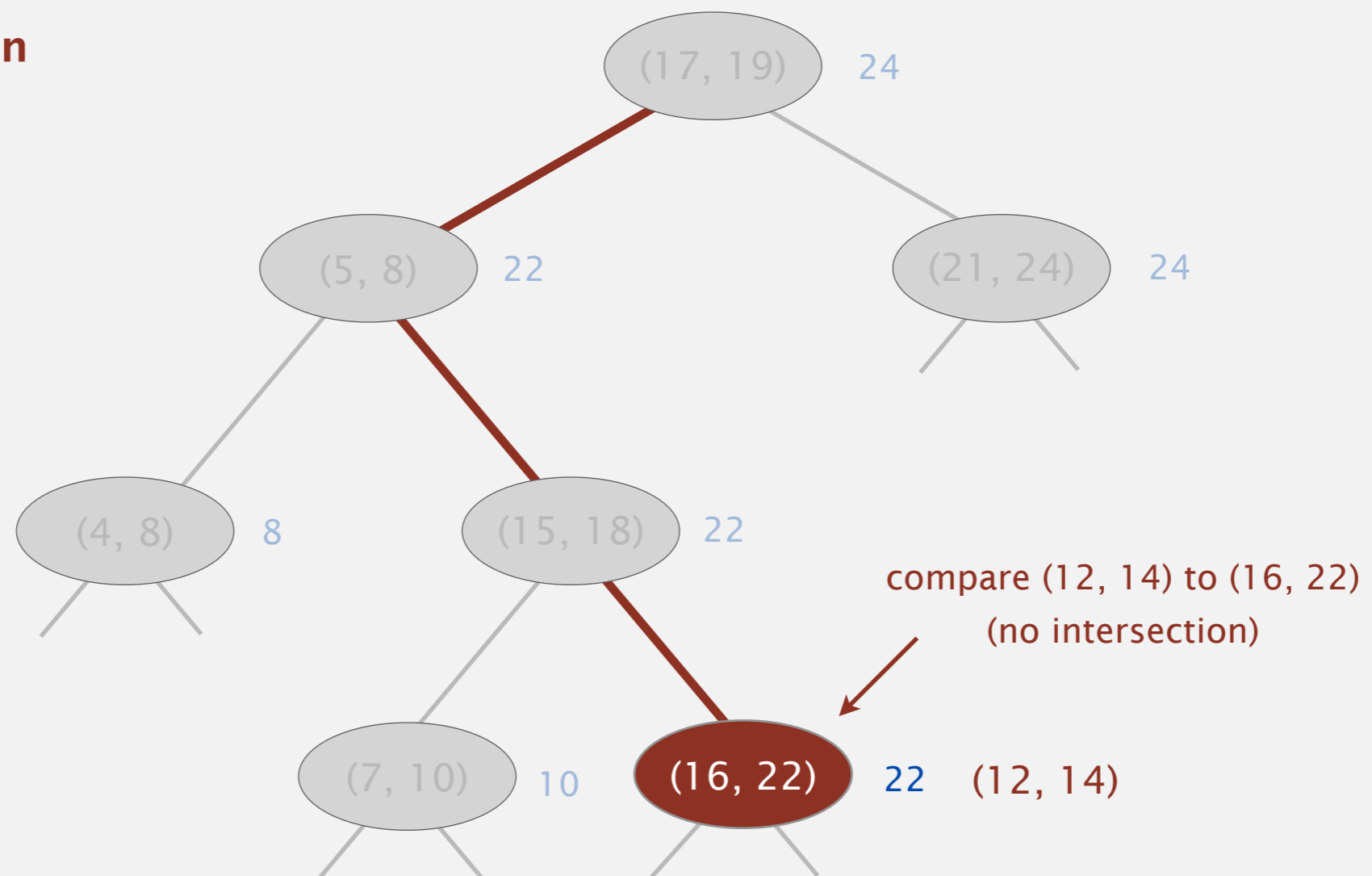


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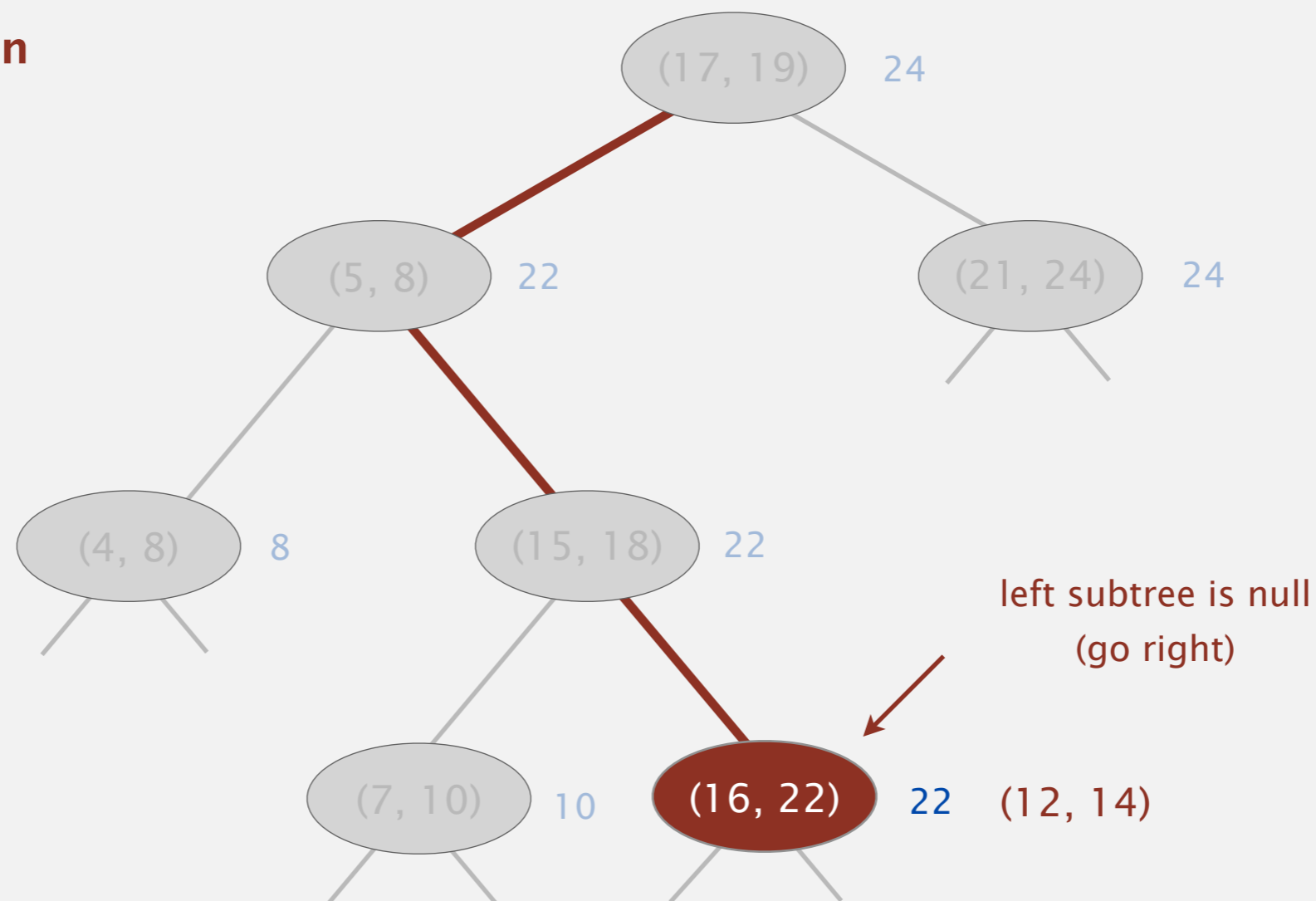


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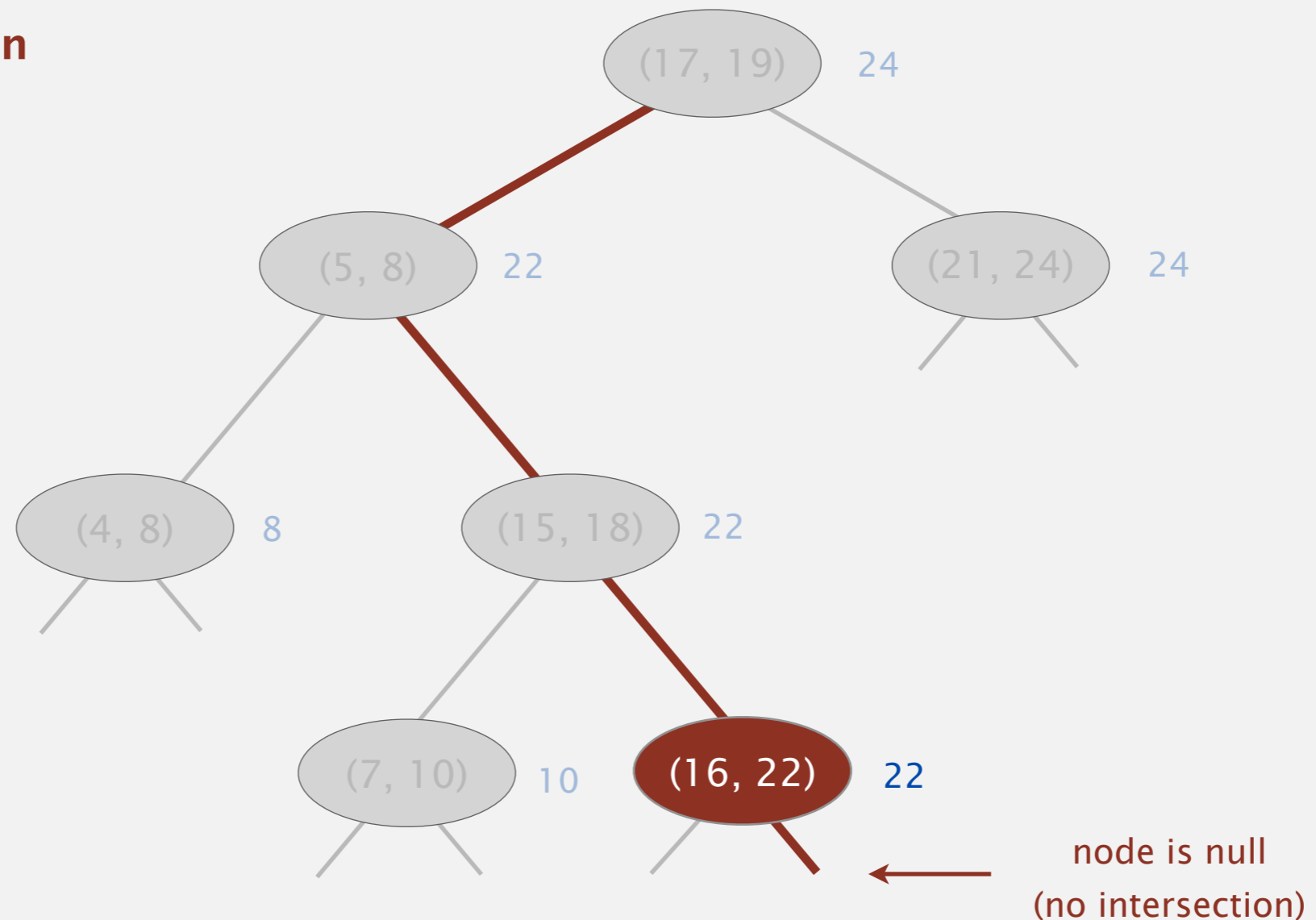


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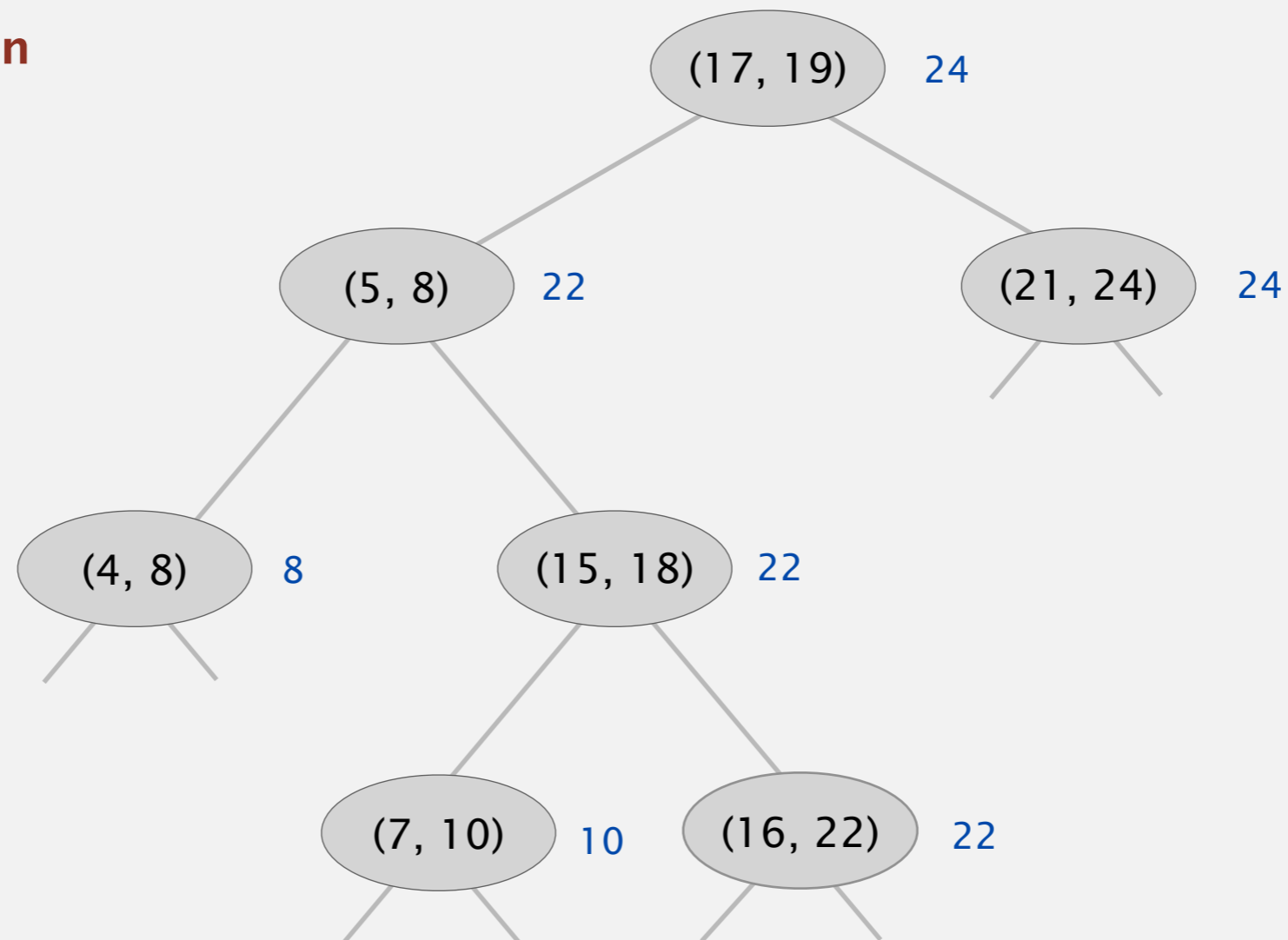


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**interval intersection
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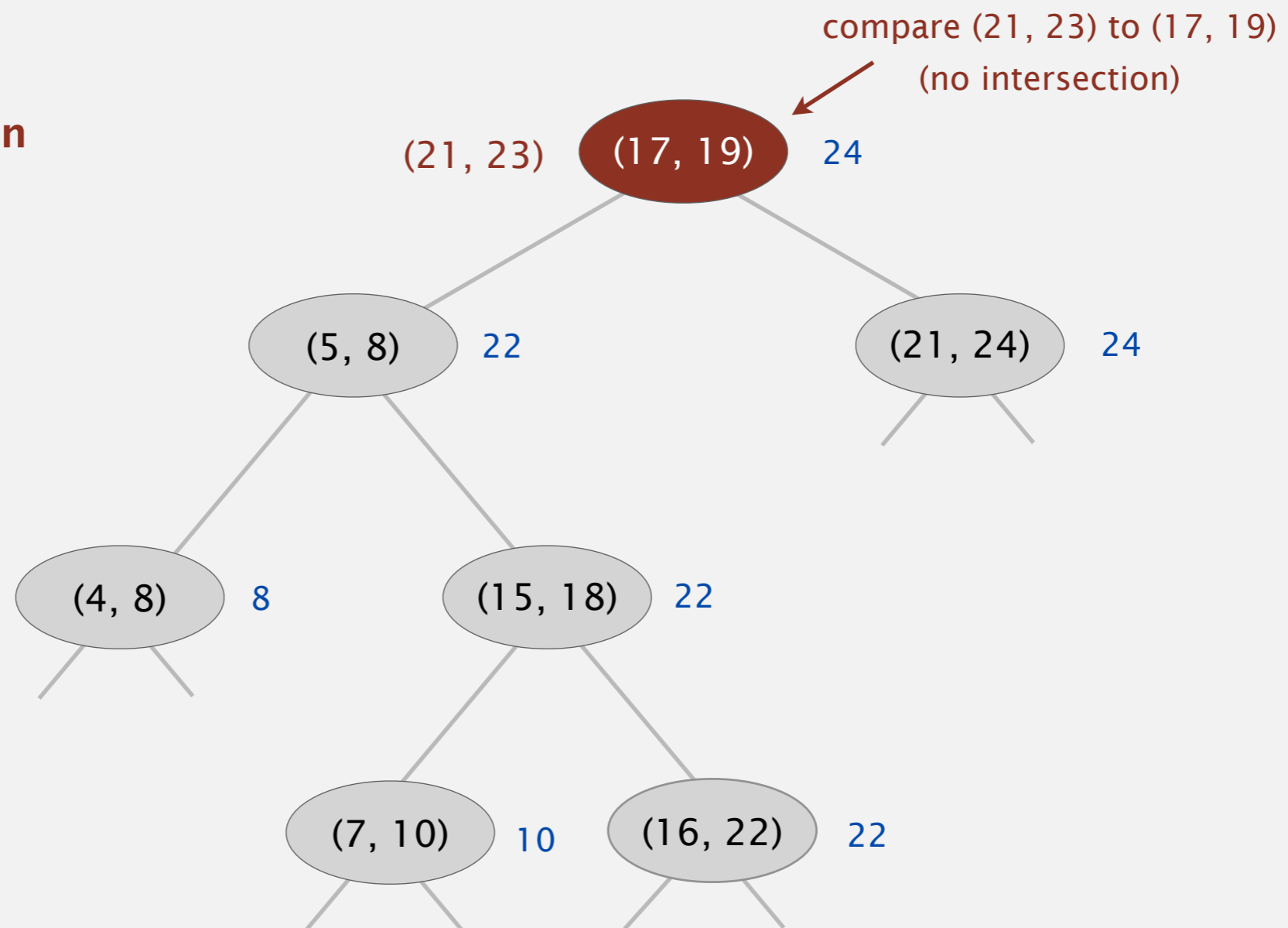


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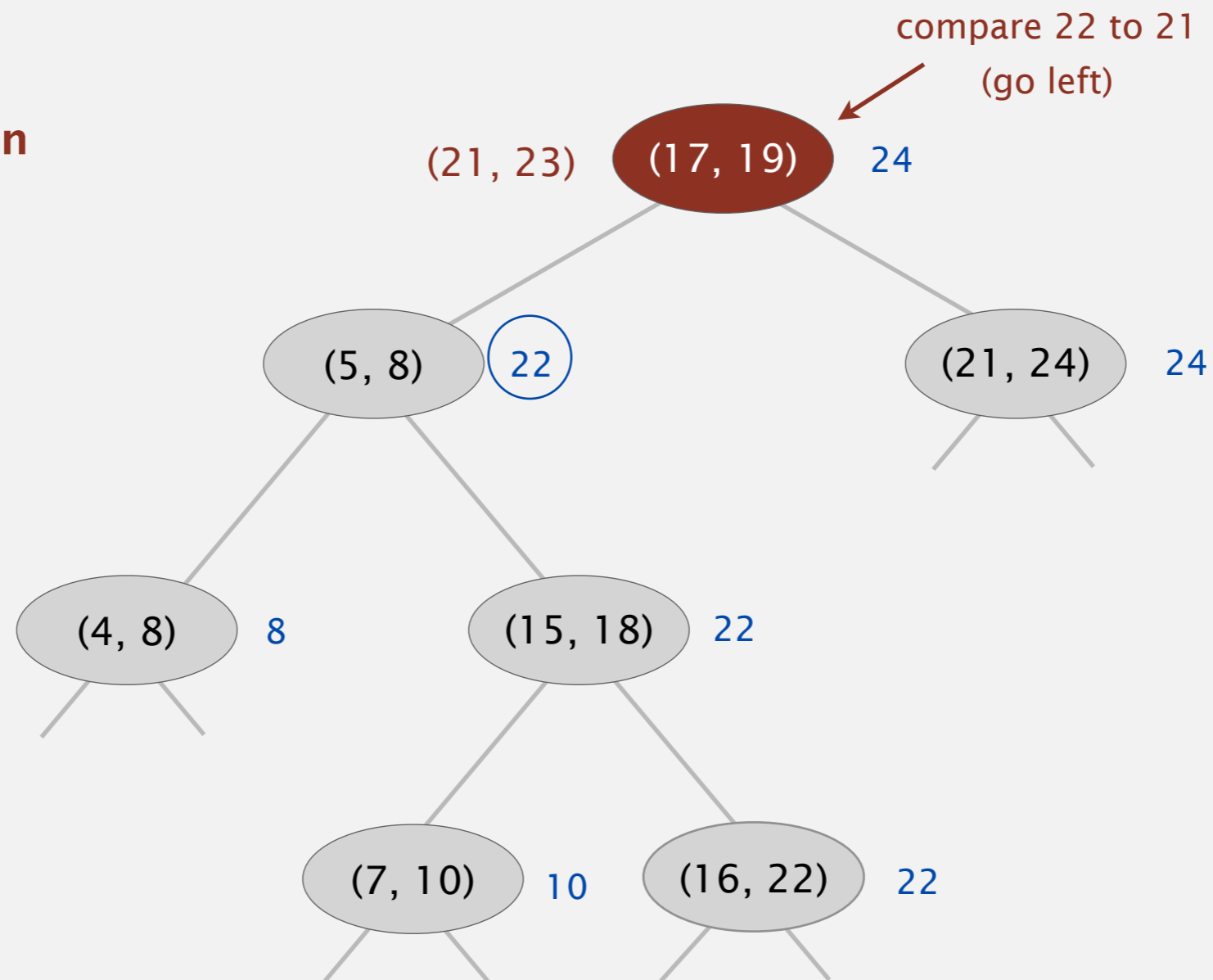


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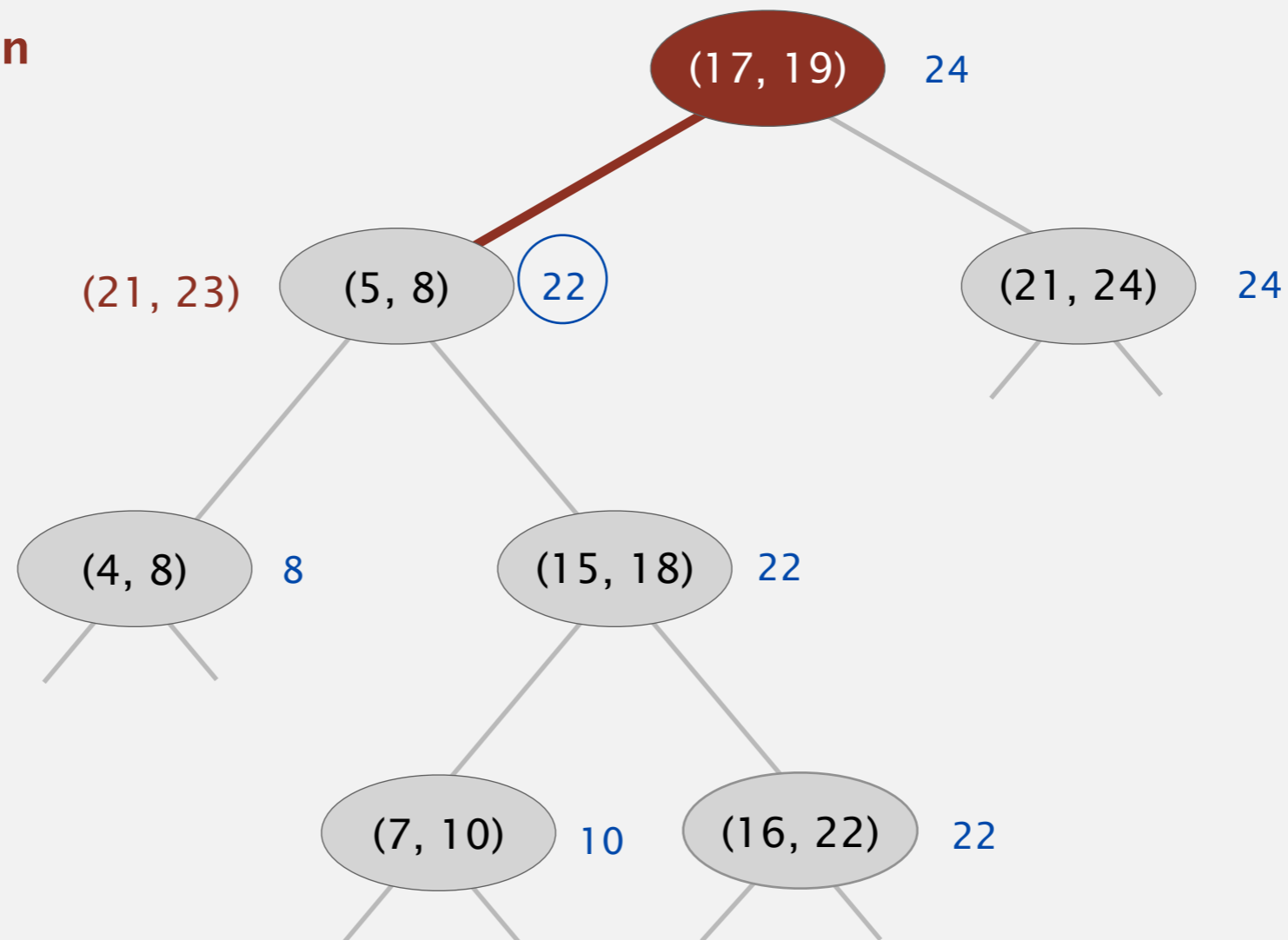


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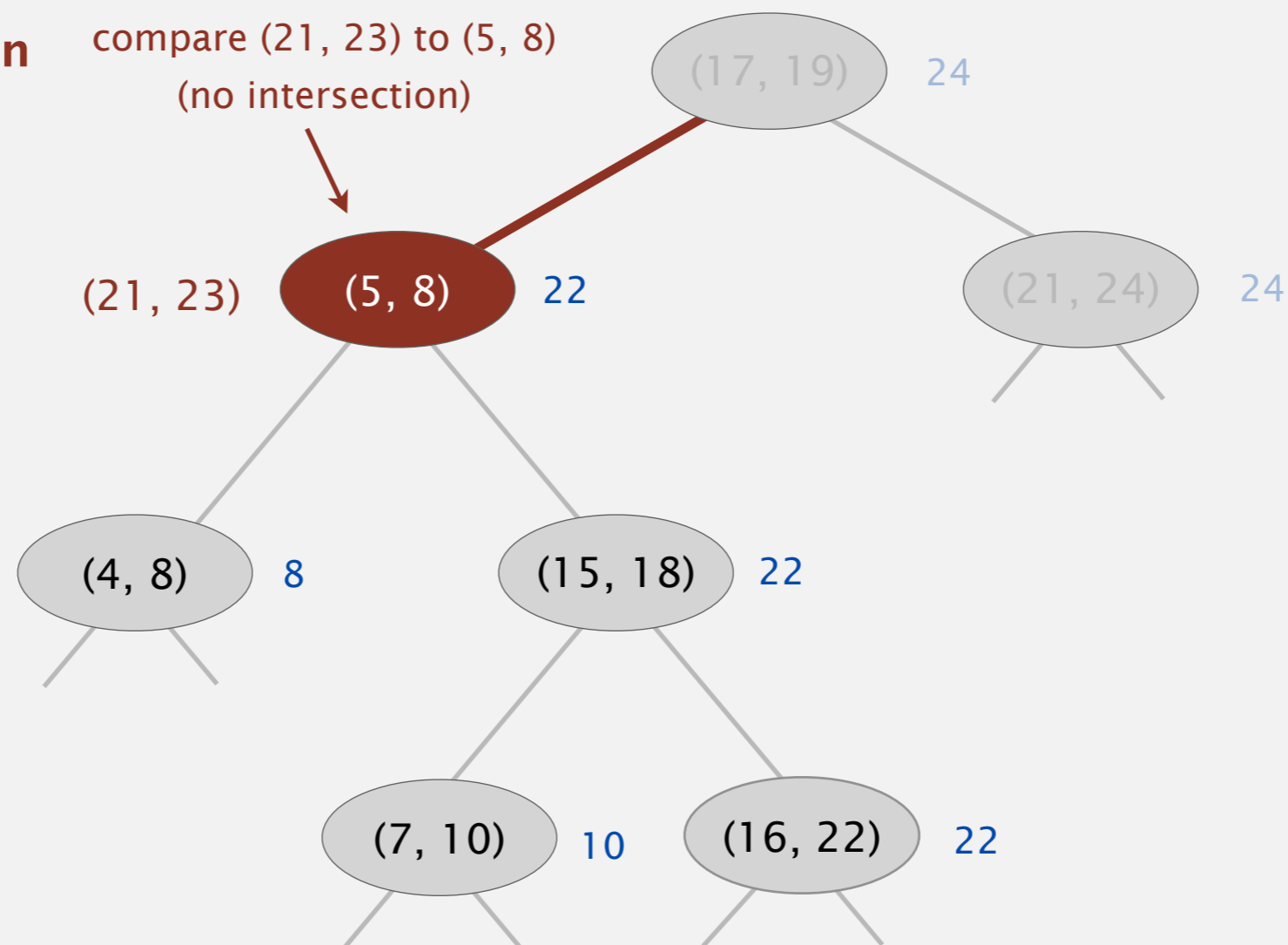


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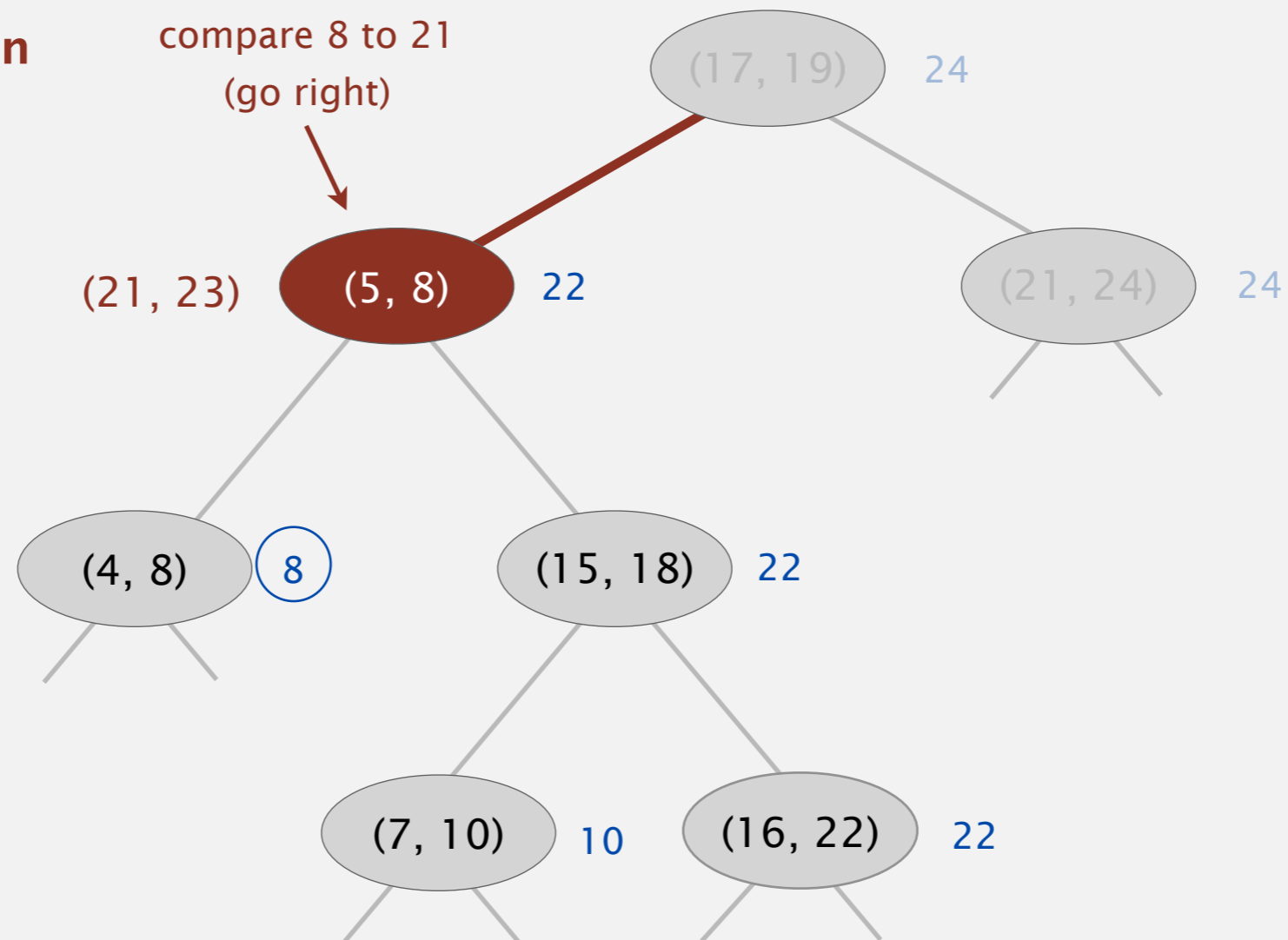


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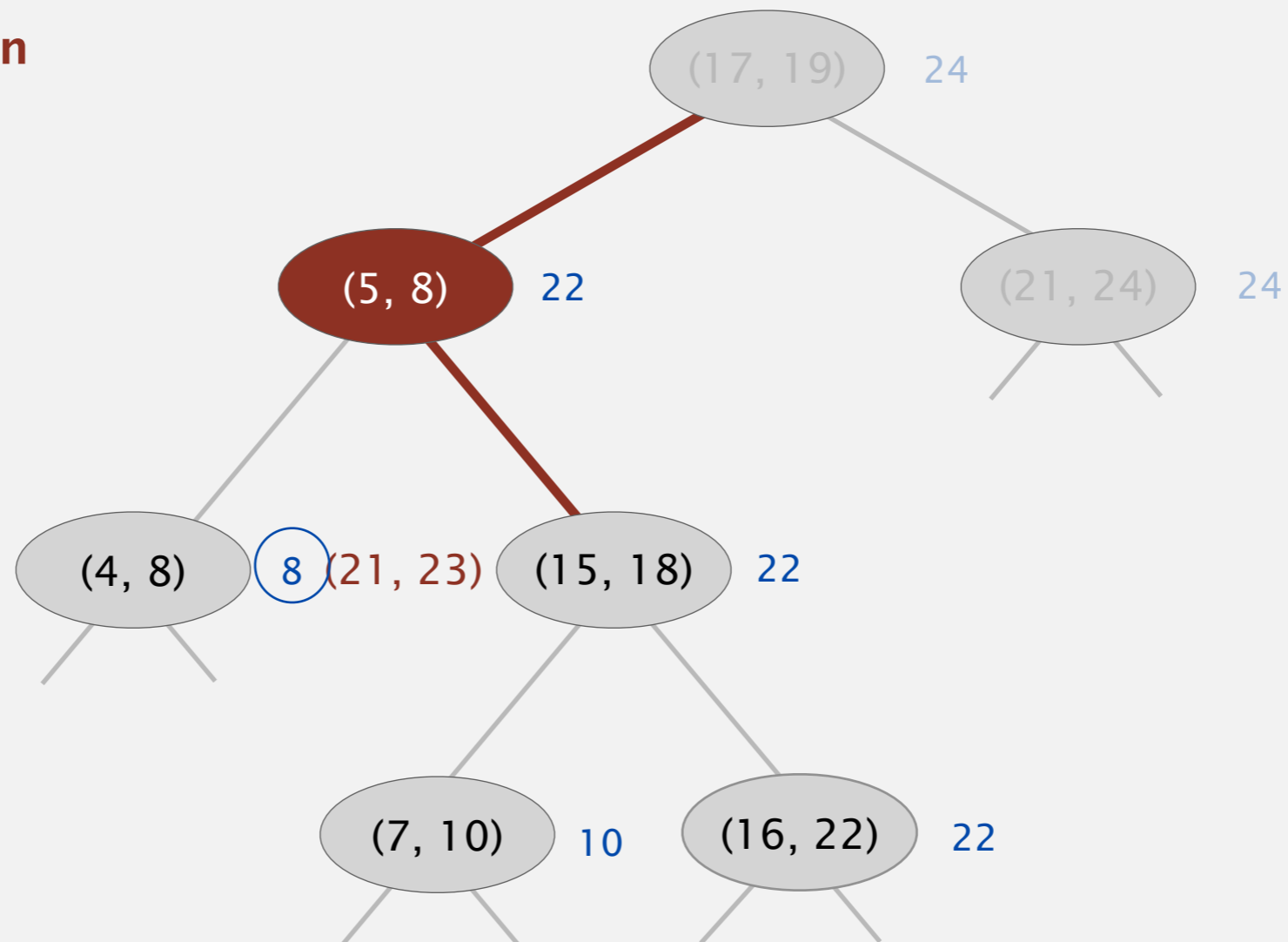


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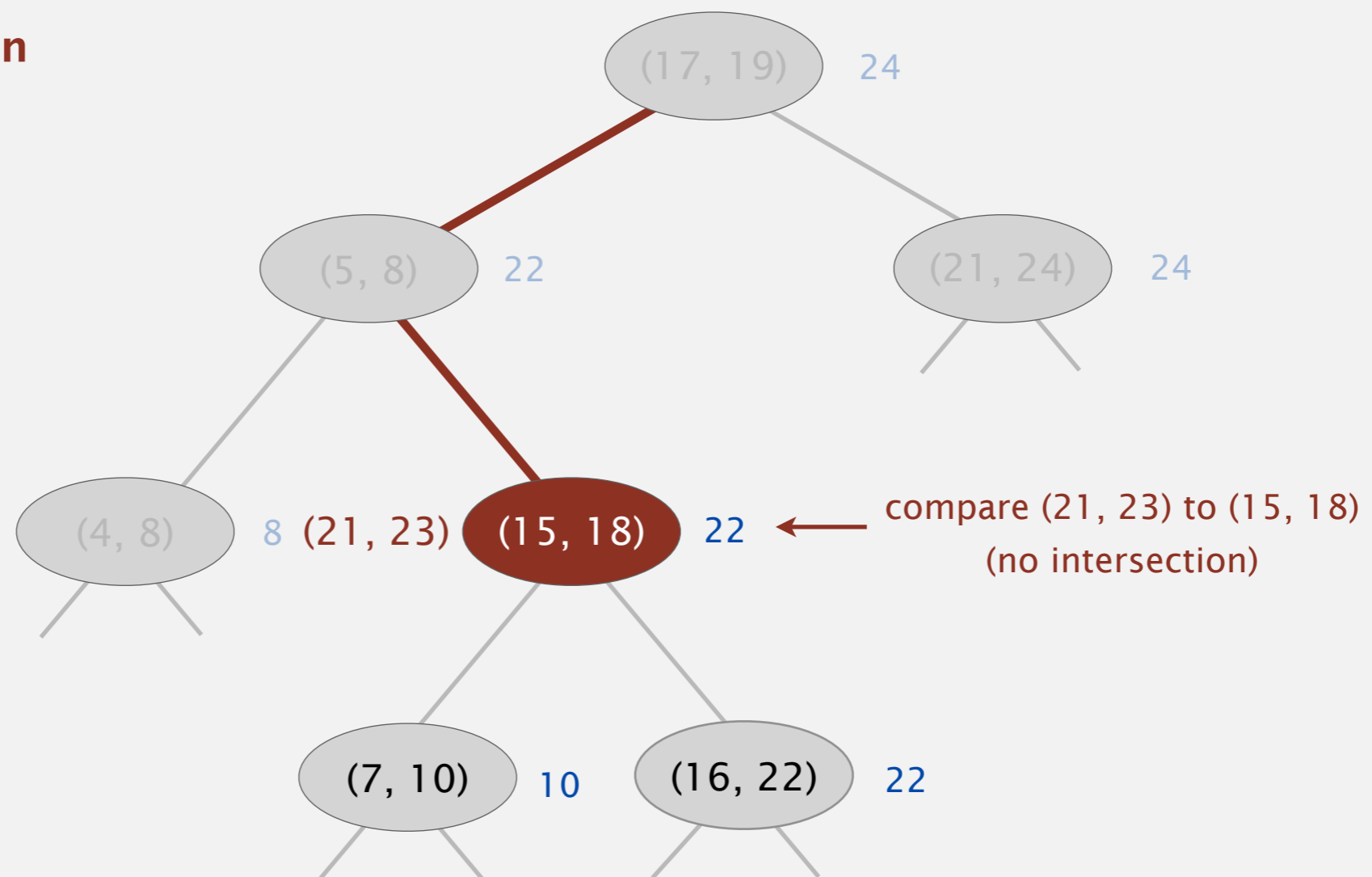


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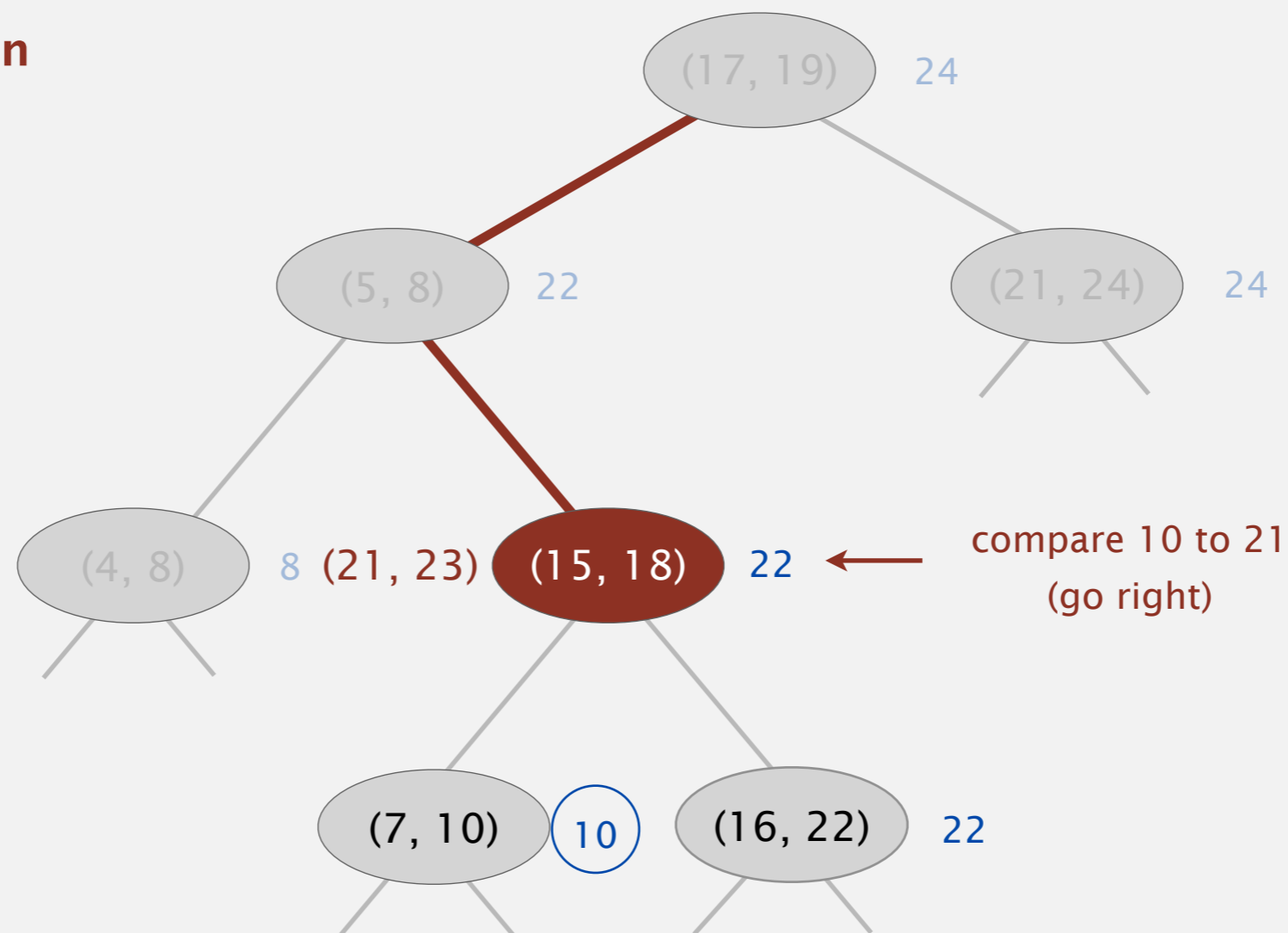


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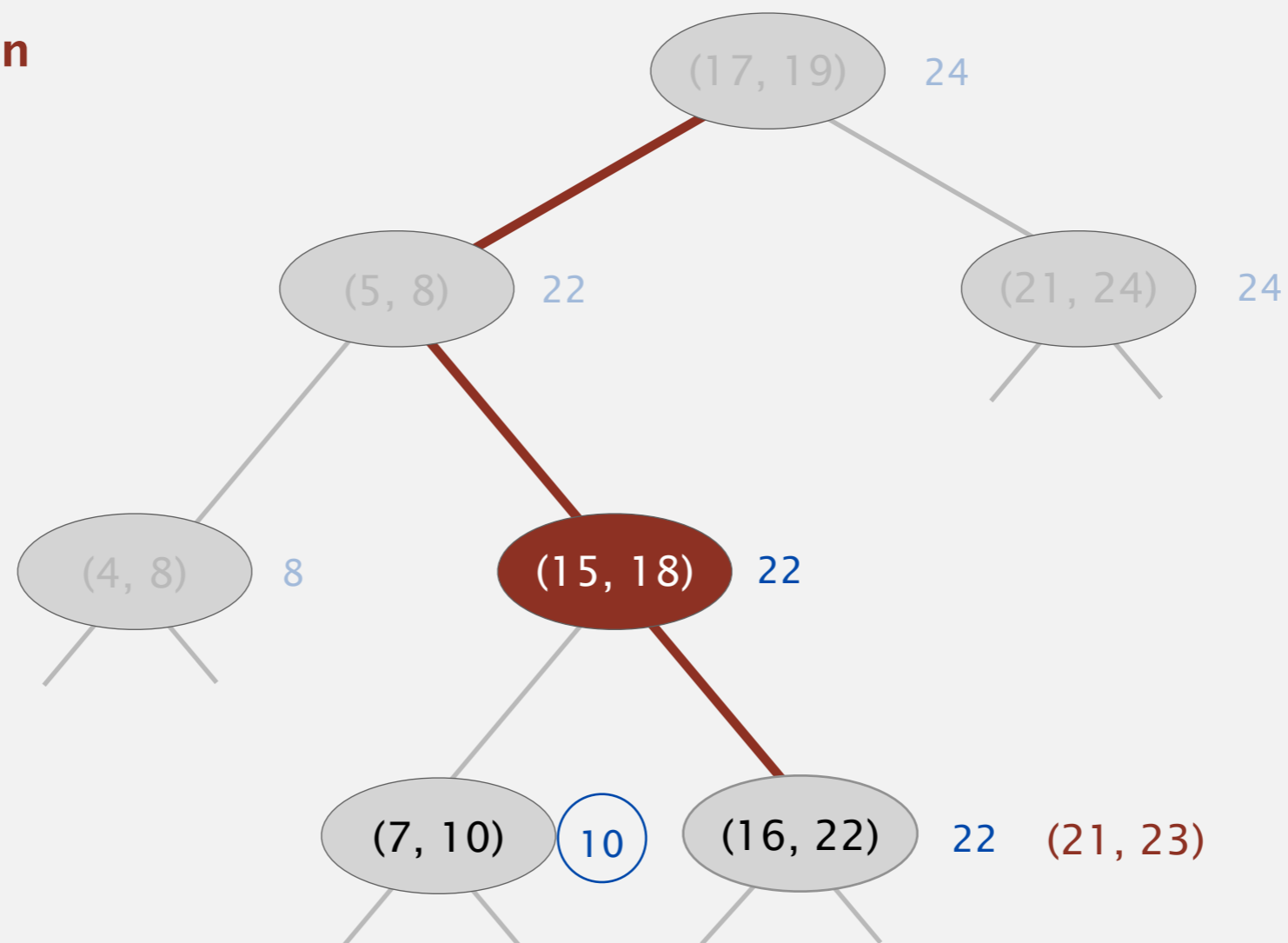


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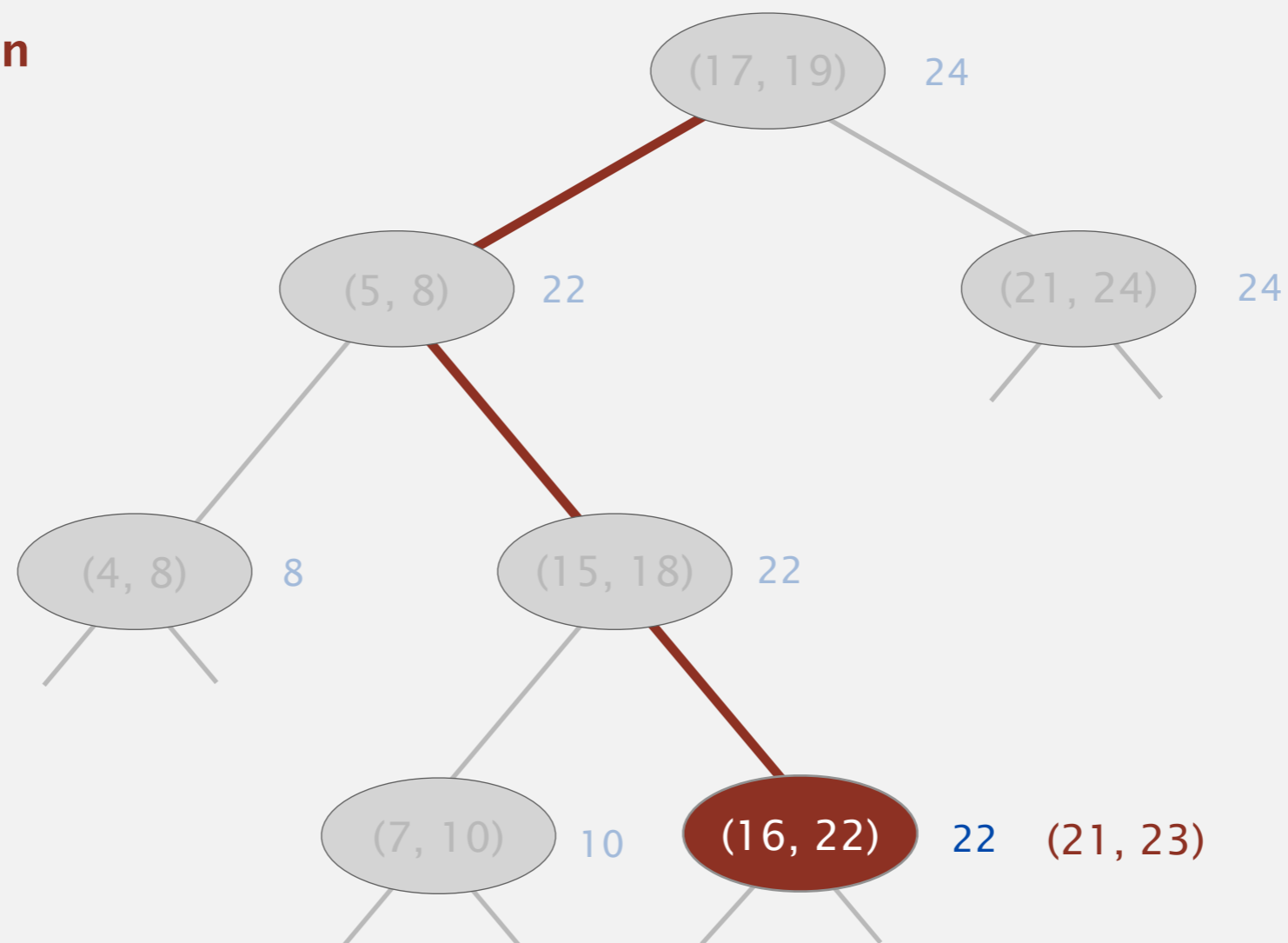


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