

Project Management

Topic 5.3 Cost-Time Trade Offs



Cost-Time Trade-Offs Methodology

- Activity duration reductions to meet a project completion date at least cost
- Each activity has two pairs of estimates for duration and cost
 - Normal: time and cost to complete an activity with normal conditions per schedule
 - Crash: shortest time an activity can be completed and its cost

Cost-Time Trade-Offs Assumptions

1. An activity cannot be completed in less than the crash time
2. There is a linear relationship between time and cost from normal to crash times
3. Resources are always available

Remember what it means to **ASSUME!**



Cost-Time Trade Offs Solution Process

1. Compute cost/unit time to reduce each activity from normal to crash

2. Reduce activities on critical path, starting with least cost first until target is met

3. Check to ensure another critical path has not resulted

4. If another critical path occurs, repeat steps 2 & 3

5.3.1 Team Exercise



Crashing

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Pages 125-126

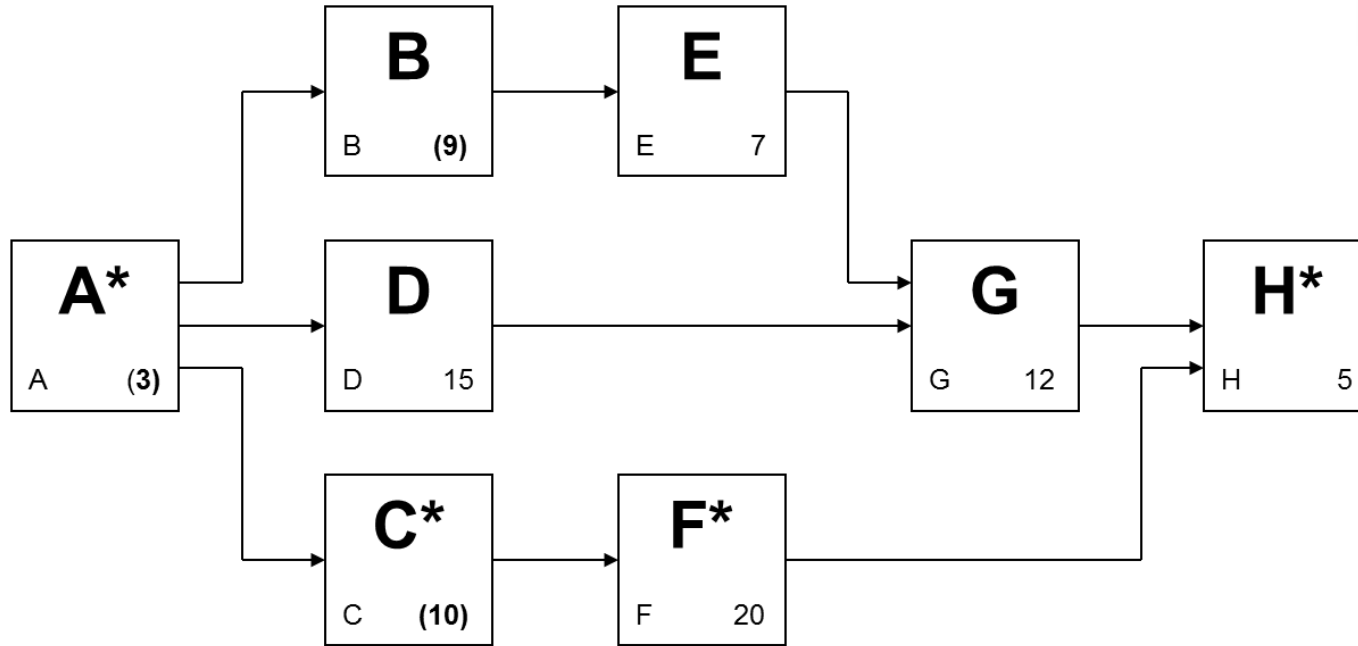
5.3.2 Class Exercise



Schedule Recovery

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Network on White Board



- Least cost to get 36-week schedule & critical path?
- Spent \$25,000. What is total cost to complete?



Raise Projector Screen

5.3.3 Team Exercise



Schedule Improvement

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