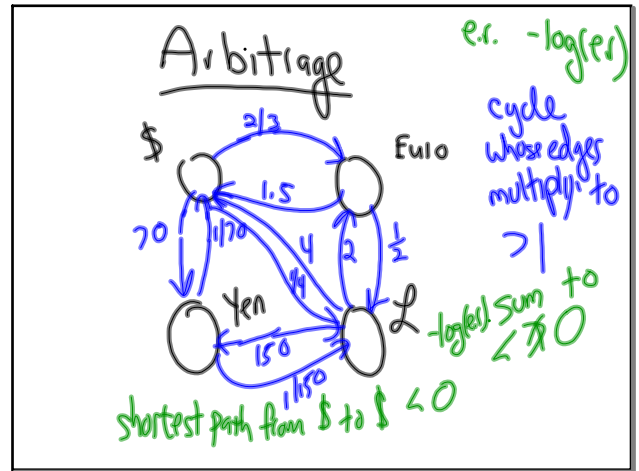
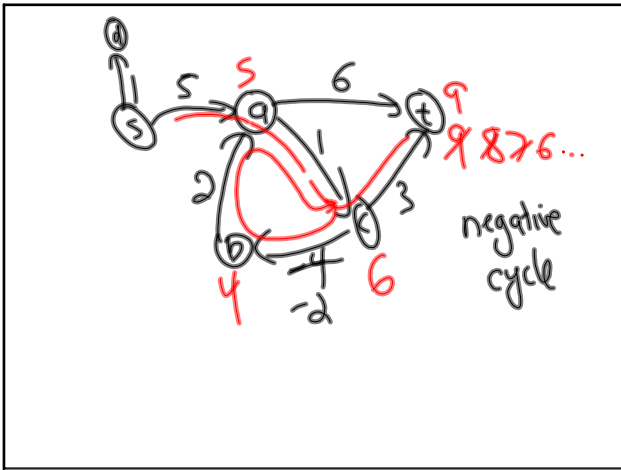


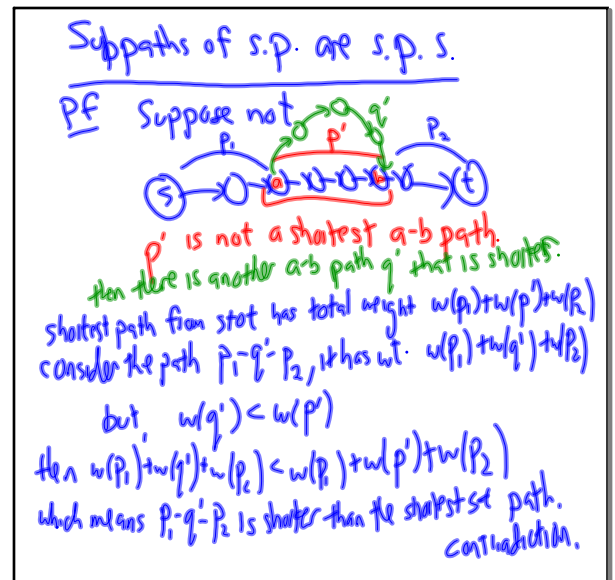
Feb 2-11:00 AM



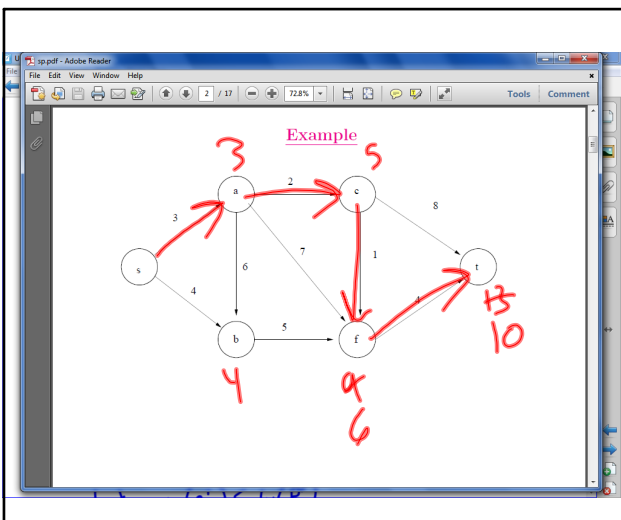
Feb 2-11:12 AM



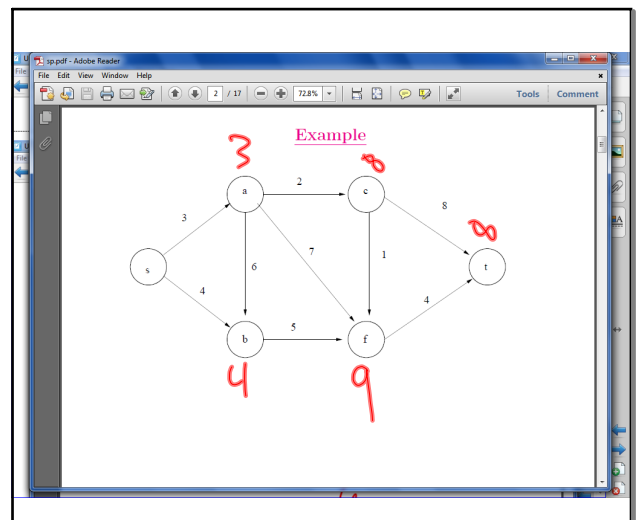
Feb 2-11:28 AM



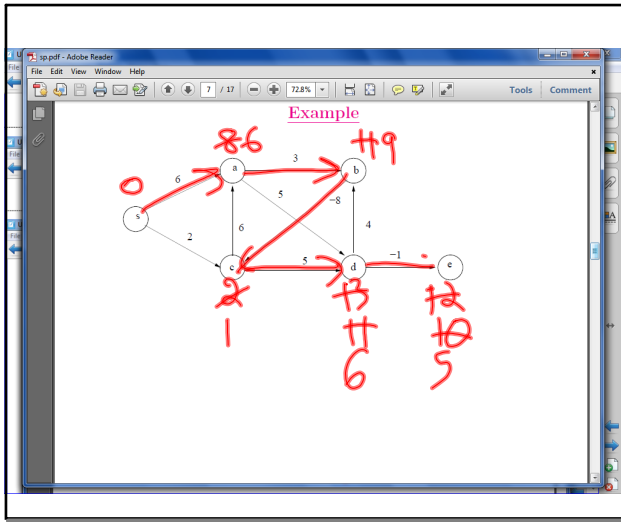
Feb 2-11:34 AM



Feb 2-11:54 AM



Feb 2-11:56 AM



Feb 2-11:58 AM

Algorithms

**Goal of an algorithm:** Relax the edges in a shortest path in order (but not necessarily consecutively).

```

Bellman-Ford(G, w, s)
1 INITIALIZE-SINGLE-SOURCE(G, s)
2 for i ← 1 to |V[G]| - 1
3   do for each edge (u, v) ∈ E[G]
4     do RELAX(u, v, w)
5 for each edge (u, v) ∈ E[G]
6   do if d[v] > d[u] + w(u, v)
7     then return FALSE
8 return TRUE
    
```

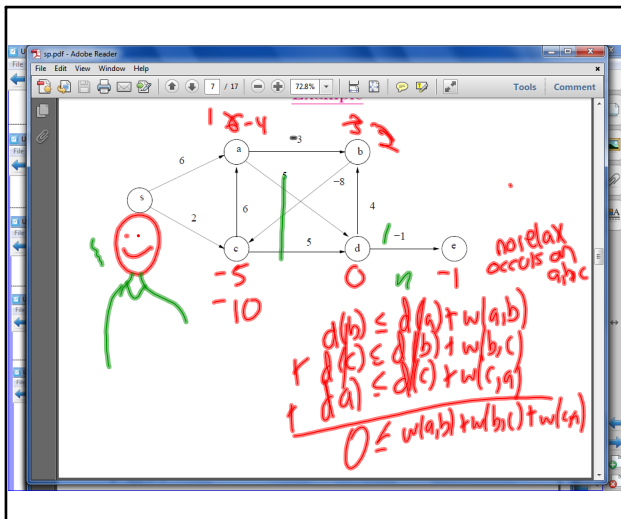
*Initialize - Single - Source(G, s)*

```

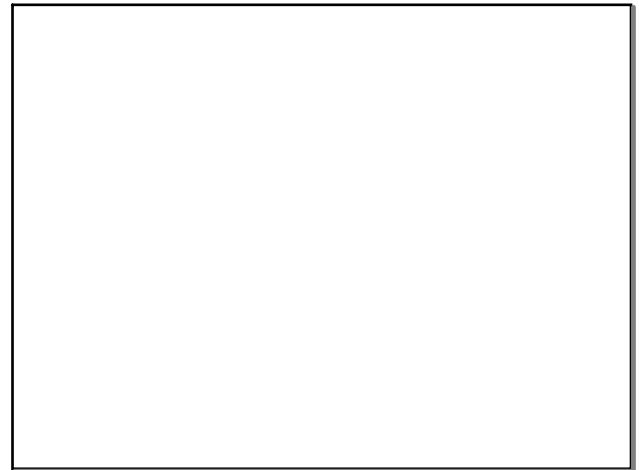
1 for each vertex v ∈ V[G]
2   do d[v] ← ∞
3   π[v] ← NIL
4 d[s] ← 0
    
```

*Handwritten notes:* 123... E 123... E... 123... E, u-1 times, 2 23 5 1 100 110 5, 7 6 5 4 3 2 1

Feb 2-12:03 PM



Feb 2-12:08 PM



Feb 2-11:51 AM