1. After Hello:

- **A**: Self, 0
- **B**: A-B, 19
- **C**: A-C, 7
- **D**: B-D, 4
- **E**: Self, 0

2. Advertisement:

- **A** sends $[(A, 0), (B, 19), (C, 7)]$ to B & C
- **B** sends $[(A, 17), (B, 0), (C, 11), (D, 4)]$ to A, C, D
- **C** sends $[(A, 7), (B, 11), (C, 0), (D, 15), (E, 5)]$ to A, B, D, E
- **D** sends $[(B, 1), (C, 15), (D, 0), (E, 13)]$ to B, C, E
- **E** sends $[(C, 5), (D, 13), (E, 0)]$ to C, D
3. Integrate

A receives:
- [(A, 17), (B, 0), (C, 11), (D, 4)] from B
- [(A, 2), (B, 11), (C, 0), (D, 15), (E, 5)] from C

For advertisement from B:
(i) (A, 17)
   - cost via B = (cost to B) + 17 = 19 + 17 = 38
   - Are we using any other B to get to A? No
   - Is the rank via B better than our current rank? No
   - current cost to A = 2 ≤ 38
   - No update

(ii) (B, 0)
   - cost via B = (cost to B) + 0 = 19 + 0 = 19
   - Are we already using B to get to B? Yes! Update cost
   - No update (cost to B via B didn't change)

(iii) (C, 11)
   - cost via B = (cost to B) + 11 = 19 + 11 = 30
   - Are we already using B to get to C? No
   - Is the rank via B better than our current rank? No
   - current cost to C = 2 ≤ 30
   - No update

(iv) (D, 4)
   - cost via D = (cost to D) + 4 = 19 + 4 = 23
   - Are we already using B to get to D? No
   - Is the rank via D better than our current rank? Yes!
   - current cost to D = 0 < 23
   - Update

A’s table:
- A: self, 0
- B: A → B, 19
- C: A → C, 2
- D: A → B, 23
(Still integrating) - Now we're on C's advertisement)

(i) (A, 2)
   cost via E = (cost to C) + 7 = 7 + 7 = 14
   Using C already? No
   C's advertised route better? No (14 > 0)

(ii) (B, 11)
   cost via C = (cost to C) + 11 = 7 + 11 = 18
   Using C already? No
   C's advertised route better? Yes (18 < 19) \[\text{Update}\]
   A's path: A: Self, 0
   B: A→C, 18
   C: A→C, 7
   D: A→B, 23

(iii) (C, 6)
    cost via C = (cost to C) + 0 = 7 + 0 = 7
    Using C already? Yes; Update cost (no change here)

(iv) (D, 13)
    cost via C = (cost to C) + 13 = 7 + 13 = 20
    Using C already? No
    C's advertised route better? Yes (20 < 23) \[\text{Update}\]
    A's path: A: Self, 0
    B: A→C, 18
    C: A→C, 7
    D: A→B, 23

(v) (E, 5)
    cost via C = (cost to C) + 5 = 7 + 5 = 12
    Using C already? No
    C's advertised route better? Yes (12 < 16) \[\text{Update}\]
    A's path: A: Self, 0
    B: A→C, 18
    C: A→C, 7
    D: A→C, 22
    E: A→C, 12
4. After all nodes have integrated:

- A: \( B = C, 15 \)
- B: \( D = B, 4 \)
- C: \( D = C, 11 \)
- D: \( E = C, 22 \)
- E: \( A = C, 12 \)

5. Advertise & integrate again:

If you perform another round of the protocol, you'll see that none of the routing tables change; the protocol has "converged".

(Advertising & integrating would continue to happen periodically, though, because link costs could change or links could fail.)