# Using the network diagram below, complete the virtual circuit tables (next page) for all switches after the following connections have been established.

* 1. Add rows to each virtual circuit table as needed
  2. Assume that the sequence of connections is cumulative; that is, the first connection is still up when the second connection is established and so on.
  3. Assume that the VCI assignment always picks the lowest unused VCI on each link, starting with zero.

Connections to be made:

1. Host A connects to Host E
2. Host B connects to Host E
3. Host C connects to Host F
4. Host F connects to Host A
5. Host D connects to Host E
6. Host D connects to Host B





B1 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 1 | B | 0 | A | 0 |
| 2 | N/A | N/A | A | 1 |
| 4 | A | 2 | B | 1 |
| 6 | A | 3 | XX | XX |

B2 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 5 | XX | XX | A | 0 |
| 6 | XX | XX | A | 1 |

B3 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 3 | N/A | N/A | C | 0 |

B4 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 3 | A | 0 | XX | XX |
| 4 | XX | XX | A | 1 |

B5 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 1 | N/A | N/A | B | 0 |
| 4 | B | 1 | XX | XX |

B6 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 1 | C | 0 | N/A | N/A |
| 2 | C | 1 | N/A | N/A |
| 3 | A | 0 | B | 0 |
| 4 | B | 1 | C | 2 |
| 5 | A | 1 | XX | XX |
| 6 | A | 2 | C | 3 |

B7 Virtual Circuit Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Message # | Incoming Interface | Incoming VCI | Outgoing Interface | Outgoing VCI |
| 3 | B | 0 | A | 0 |
| 5 | C | 0 | A | 1 |
| 6 | C | 1 | A | 2 |