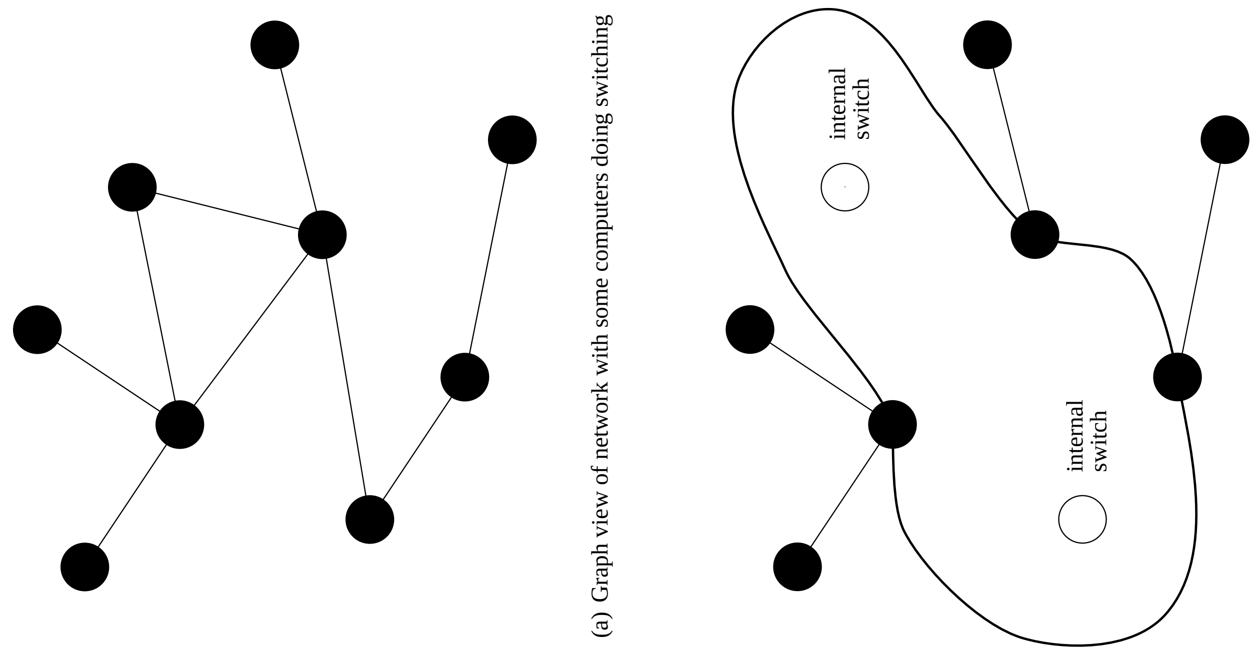
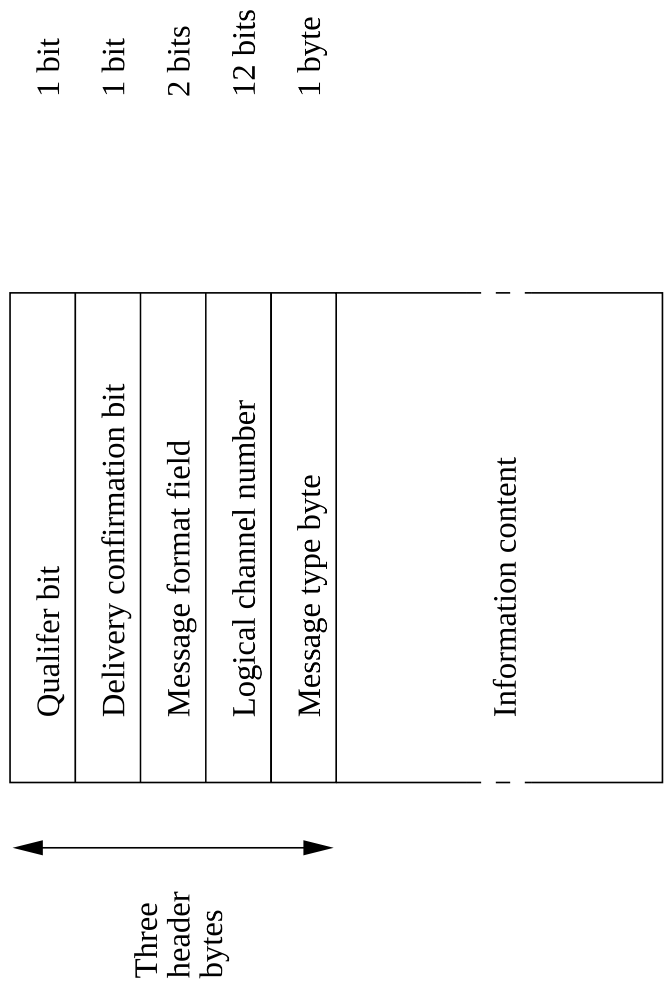


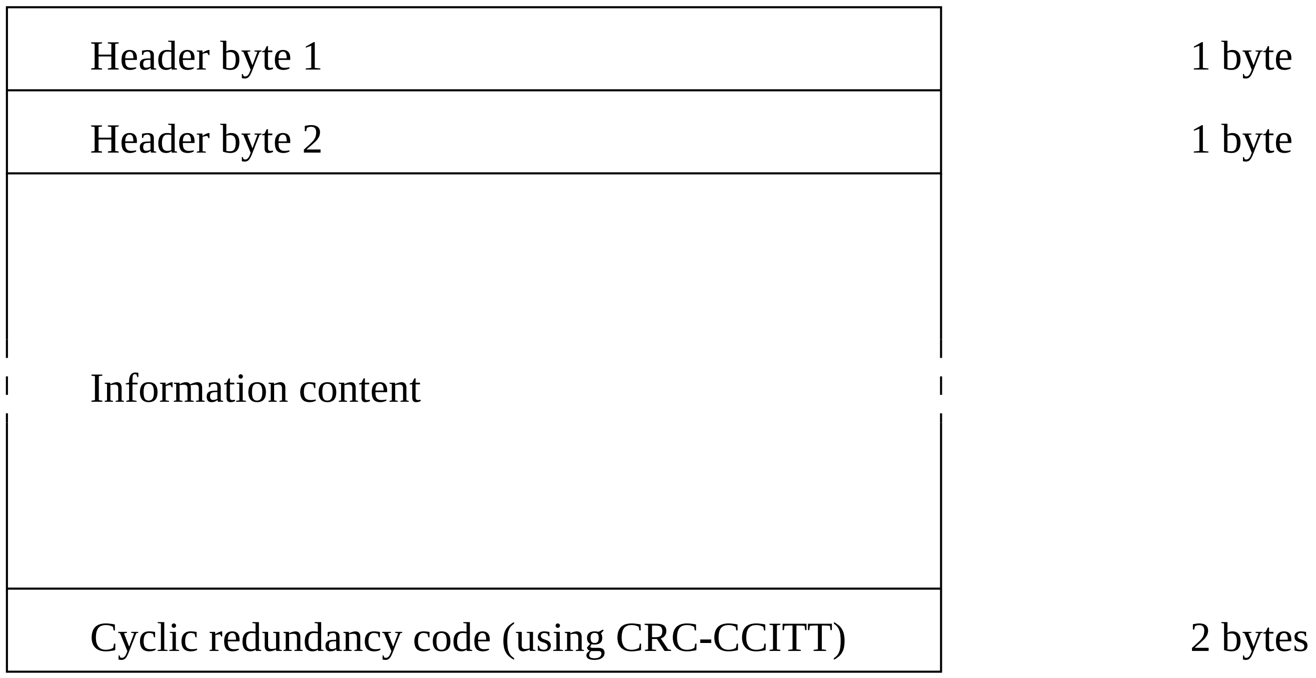
(a) Graph view of network with some computers doing switching

(b) Black box view of network shown in (a)

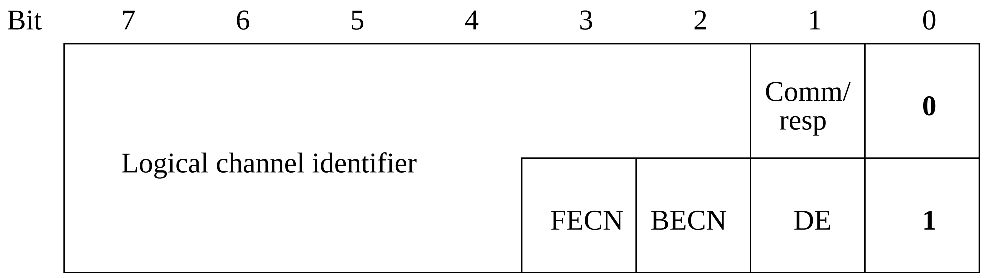
Two ways of viewing a network



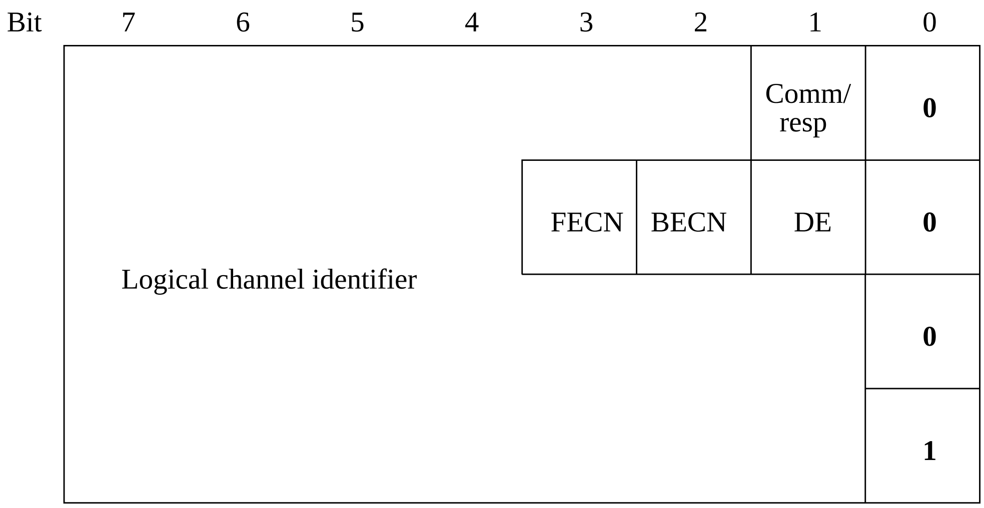
Format of X.25 message



Format of frame relay message



(a) Two-byte header - Bit 0 is the extended address bit



(b) Four-byte header - Bit 0 is the extended address bit

Examples of frame relay header format

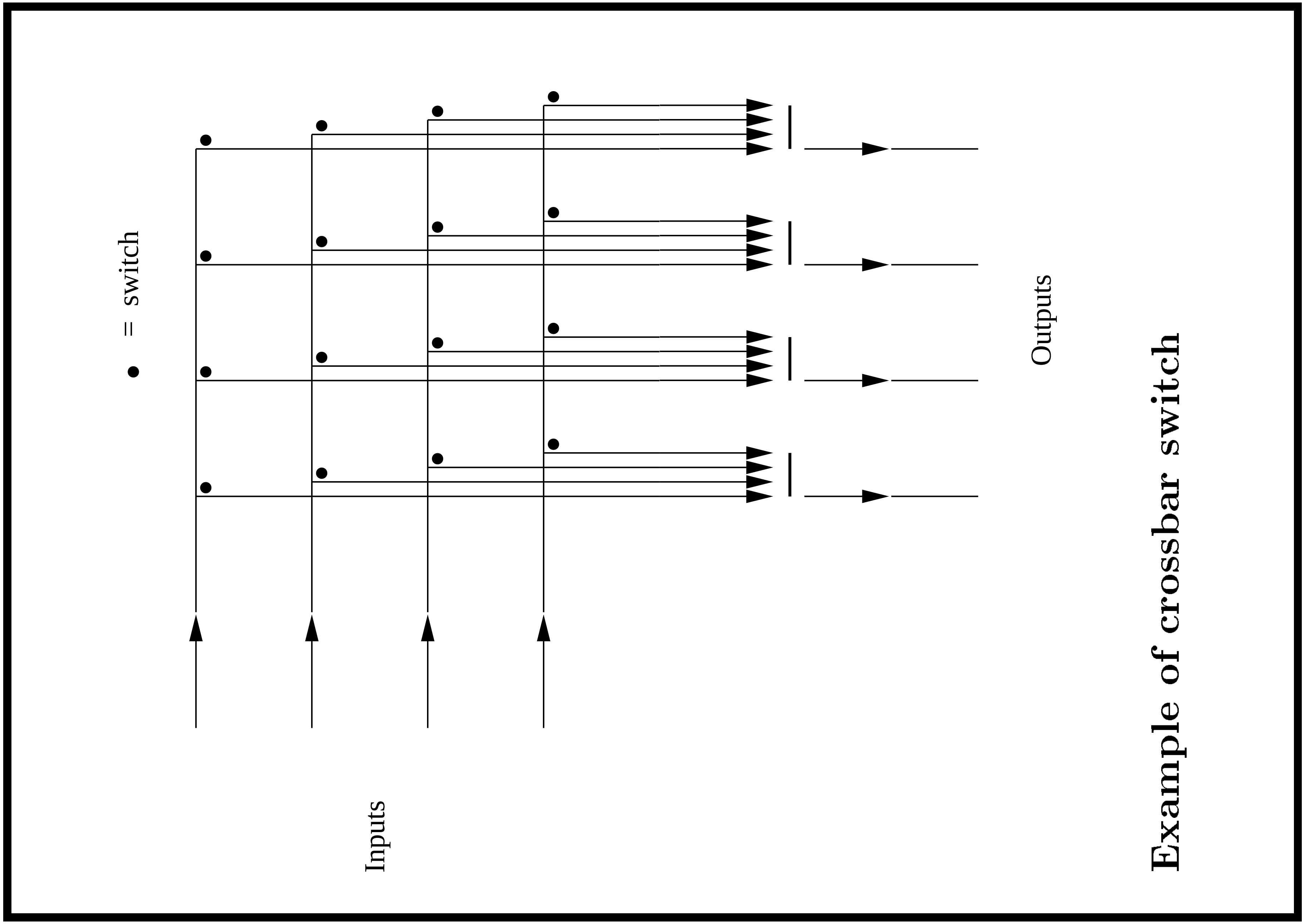
Virtual path identifier (VPI)	12 bits
Virtual channel identifier (VCI)	16 bits
Payload type	3 bits
Cell loss priority	1 bit
Cyclic redundancy code (using CRC-8 generator)	1 byte
Information content	48 bytes

(a) Format of ATM message used between switches

Generic flow control	4 bits
Virtual path identifier (VPI)	8 bits
Virtual channel identifier (VCI)	16 bits
Payload type	3 bits
Cell loss priority	1 bit
Cyclic redundancy code (using CRC-8 generator)	1 byte
Information content	48 bytes

(b) Format of ATM message used between computers and switches

Formats of ATM messages



Example of crossbar switch