Q. In an IP packet, the value of HLEN is 516 and the value of the total length field is 002816. How many bytes of data are being carried by this packet?

In an IP packet, the HLEN field represents the header length in 32-bit words. To determine the actual length of the IP header, you need to multiply the value of HLEN by 4.

In this case, the value of HLEN is 516. Multiplying 516 by 4 gives us 2064 bytes, which is the length of the IP header.

The total length field specifies the total length of the IP packet, including both the header and the data. The value of the total length field is given as 002816.

To find the length of the data carried by the packet, you subtract the length of the header from the total length. So, in this case, the data length can be calculated as follows:

Total length - Header length = Data length

= 2816 - 2064

= **752** bytes

Therefore, 752 bytes of data are being carried by this packet.