

| Byte address | Contents at each byte                             | Machine code      |
|--------------|---|-------------------|
| 201          | Opcode containing addl3                           | c1 <sub>hex</sub> |
| 202          | Index mode specifier for [r4]                     | 44 <sub>hex</sub> |
| 203          | Register indirect mode specifier for (r3)         | 63 <sub>hex</sub> |
| 204          | Word displacement mode specifier using r2 as base | c2 <sub>hex</sub> |
| 205          | The 16-bit constant 737                           | e1 <sub>hex</sub> |
| 206          |   | 02 <sub>hex</sub> |
| 207          | Register mode specifier for r1                    | 51 <sub>hex</sub> |

**FIGURE E.51** The encoding of the VAX instruction `addl3 r1, 737(r2),(r3)[r4]`, assuming it starts at address 201. To satisfy your curiosity, the right column shows the actual VAX encoding in hexadecimal notation. Note that the 16-bit constant 737<sub>ten</sub> takes 2 bytes.