-128	64	32	16	8	4	2	1

(a) An eight-position two's complement value box

-128	64	32	16	8	4	2	1
1	0	0	0	0	0	1	1

-128 +2 +1 = –125

(b) Convert binary 10000011 to decimal

-128	64	32	16	8	4	2	1
1	0	0	0	1	0	0	0

-120 = -128 +8

(b) Convert decimal -120 to binary

Figure 8.3 Use of a Value Box for Conversion Between Twos Complement Binary and Decimal