(a) Format

$$0.11010001 \times 2^{10100} = 0\ 10010011\ 10100010000000000000000$$
$$-0.11010001 \times 2^{10100} = 1\ 10010011\ 10100010000000000000000$$
$$0.11010001 \times 2^{-10100} = 0\ 01101011\ 10100010000000000000000$$
$$-0.11010001 \times 2^{-10100} = 1\ 01101011\ 10100010000000000000000$$

(b) Examples

Figure 8.18 Typical 32-Bit Floating-Point Format