

Single precision		Double precision		Object represented
Exponent	Fraction	Exponent	Fraction	
0	0	0	0	0
0	Nonzero	0	Nonzero	$\pm$ denormalized number
1–254	Anything	1–2046	Anything	$\pm$ floating-point number
255	0	2047	0	$\pm$ infinity
255	Nonzero	2047	Nonzero	NaN (Not a Number)

**FIGURE 3.13 IEEE 754 encoding of floating-point numbers.** A separate sign bit determines the sign. Denormalized numbers are described in the *Elaboration* on page 232. This information is also found in Column 4 of the MIPS Reference Data Card at the front of this book.