



FIGURE B.5.10 (Top) A 1-bit ALU that performs AND, OR, and addition on *a* and *b* or \bar{b} , and (bottom) a 1-bit ALU for the most significant bit. The top drawing includes a direct input that is connected to perform the set on less than operation (see Figure B.5.11); the bottom has a direct output from the adder for the less than comparison called Set. (See Exercise B.24 at the end of this appendix to see how to calculate overflow with fewer inputs.)