Please print out this form (two-sided, if you can) and write your answers legibly in the spaces provided. If you can’t write legibly, type.

1. Consider the testbench for the `findFirstOne` circuit (in the book). Suppose there is a failure of the first assert statement in the testbench when the loop index is 5. What does this tell you about the input to the circuit and the output produced by the circuit?

2. If the data input of a 16 bit barrel shifter is equal to ab34 and the shift input is equal to 4, what is the value of the output?
3. In the text, the testbench for the *inRange* circuit runs a series of tests, two of which are shown. For each of these tests, what state is the circuit in when the test finishes?