Simulation

Exercise 1:

1. typical inputs, 9, 4
2. minimum and maximum valid inputs, 0, 16'h7fff
3. invalid inputs, and 16'hffff
4. randomly-chosen values. 373

Give examples of appropriate test inputs for each of the above categories if you were testing a circuit that computed the square root of a 16-bit signed number.

Exercise 2: What's the difference between `wait(x) y='1;` and `@(x) y='1;`?

↳ wait for x ≠ 0

↳ wait for change in x

Exercise 3: How could you:

(a) terminate the simulation if a test vector failed? Use $finish

(b) change the clock frequency to 10 MHz? change delay to 50ns (#50ns).

(c) print each test vector as it's read? use $display() (see notes)

(d) assert the reset input for two clock cycles? have two lines with reset = 1