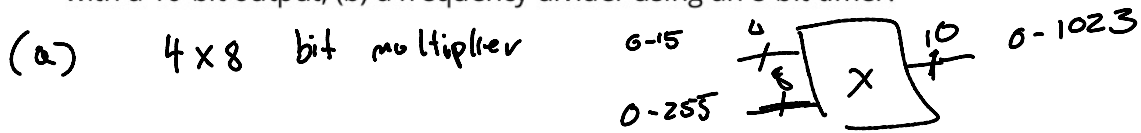# Verification

Exercise 1: Give examples of appropriate test inputs for each of the above categories if you were testing: (a) an 4x8-bit multiplier with a 10-bit output, (b) a frequency divider using an 8-bit timer?

(a)   4×8 bit multiplier   0-15

0-255   [X]   10   0-1023

① typical: 1·2 , 2·2
              10·5

② extreme valid: 0·0 , 15·0
                   15·255, 0·255

③

④   15·255 → 3825 ?

                random ( ) · random ( )

(b)

①   10
②   1 , 255
③   0   ?
④

Exercise 2: What two tcl commands are executed by the following tcl script: set x [expr 1 + 1]?

↑   ↑

Exercise 3: What's the difference between wait(x) y='1; and @(x) y='1;?

wait (x)   waits   until x is   true   (non-zero)

@ (x)   "   "   an event on x   (a change).

            always   always
              x <= '1;   ≡   x = #0 '1;

         assign x = #5ns '1;