1. (5 points) Consider the following VHDL code fragment.

```vhdl
signal x: unsigned(15 downto 0);
signal y: std_logic_vector(10 downto 4);
signal z: unsigned(x'length downto y'left);
...
x(y'right downto z'low) <= (y'right=>'1', z'low=>'1', others=>>'0');
z <= y(y'length-2 downto y'low) & y(y'high downto y'length-1);
```

What is the value of `z'range`?

What is the value of `x` in hex?

If `y="1011011"`, what is the value of `z(13 downto 10)`?
2. (5 points) The figure below shows a portion of a simulation of the binary input module with four blanks. Fill in the blanks with the correct values.

List all the possible values of the delta signal.