Exercise 1.21

a) 01011001

b) 01101001

64 + 32 + 8 + 1 = 105

c) A binary number can only be odd if its right-most digit is a 1.
A binary number can only be a multiple of 4 if its two rightmost digits are zeros.
A binary number can only be a multiple of 8 if its three rightmost digits are zeros.
A binary number can only be a multiple of 32 if its five rightmost digits are zeros.

d)

46 → 00101110	11011010 → 218
108 → 01101100	10111011 → 187
13 → 00001101	00001100 → 12
67 → 01000011	11101100 → 236
151 → 10010111	00011100 → 28