Ex. 44 — We proved that the function nmb10 inverts the function dgts. That is, (nmb10 (dgts n)) is the same as n for any natural number n (page 71). However, it is not quite true that dgts inverts nmb10. Why not? Give an example of a decimal numeral xs for which (dgts (nmb10 xs)) is different from xs.

Ex. 45 — Describe a class of decimal numerals such that that (dgts (nmb10 xs)) is the same as xs when xs is a numeral from that class.

Ex. 48 — Adapt the proof of {Horner 10} (page 70) to prove {Horner 2}:

(nmb [x0 x1 x2 . . . xn]) = (x0 + x1 × 21 + x2 × 22 + . . . xn × 2n)

Ex. 49 — Prove theorem {bits-ok}: ((nmb (bits n)) = n), assuming n is a natural number. That is, the function nmb (page 75) inverts the function bits (page 74).