Assignment for Tuesday 2/13

I. Exercises from book:
section 4.2 → 3, 5, 9, 12a, 13, 15
section 4.3 → 20bc, 5ab, 7, 16, 17b, 19

II. Supplementary Exercises:

17. Let \( N = (a_m a_{m-1} \ldots q_2 q_1 q_0)_0 \) be the
decimal representation of \( N \).
Let \( M = a_m 10^{m-1} + a_{m-1} 10^{m-2} + \ldots + a_2 10 + a_1 \)

a) Show that \( 7 \mid N \iff 7 \mid M-2a_0 \)
b) Show that \( 13 \mid N \iff 13 \mid M-9a_0 \)