Routh's Test

Problem: check whether the polynomial

$$p(s) = s^n + a_1 s^{n-1} + a_2 s^{n-2} + \ldots + a_{n-1} s + a_n$$

is strictly stable.

We begin by forming the Routh array using the coefficients of p:

s^n :	1	a_2	a_4	a_6	$\ldots$	(if necessary, add zeros in the
s^{n-1} :	a_1	a_3	a_5	a_7	$\ldots$	second row to match lengths)

Note that the very first entry is always 1, and also note the order in which the coefficients are filled in.