Assignment 6 (ELEC 341 L6_Stability)

Problem 1:

Tell how many roots of the following polynomial are in the right half-plane, in the left half-plane, and on the $j\omega$-axis:

$$P(s) = s^5 + 3s^4 + 5s^3 + 4s^2 + s + 3$$

Use Routh-Hurwitz criterion.

Solution:

s^5	1	5	1
s^4	3	4	3
s^3	3.667	0	0
s^2	4	3	0
s^1	-2.75	0	0
s^0	3	0	0

2 rhp; 3 lhp