

A open-loop transfer function is given as,

$$G(s) = \frac{1}{s^3 + 2s^2 + 3.20201s + 4.40404}$$

which of the following PI-controllers does not stabilize the system in a closed-loop unit feedback structure?

(a)  $F(s) = -2.5 + \frac{0.25}{s}$

(b)  $F(s) = -2.5 + \frac{0.5}{s}$

(c)  $F(s) = -3.5 + \frac{0.25}{s}$

(d)  $F(s) = -3.5 + \frac{0.5}{s}$

(e)  $F(s) = -2.2 + \frac{0.5}{s}$

$p_0 : p_1 :$