A open-loop transfer function is given as,

$$G(s) = \frac{1}{s^3 + 2.0s^2 + 3.0s + 4.0}$$

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) $F(s) = 1.0 + \frac{1.0}{s}$

(c) $F(s) = -1.0 + \frac{2.0}{s}$

(d) $F(s) = -1.0 + \frac{1.0}{s}$

(e) $F(s) = -6.0 + \frac{1.0}{s}$

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