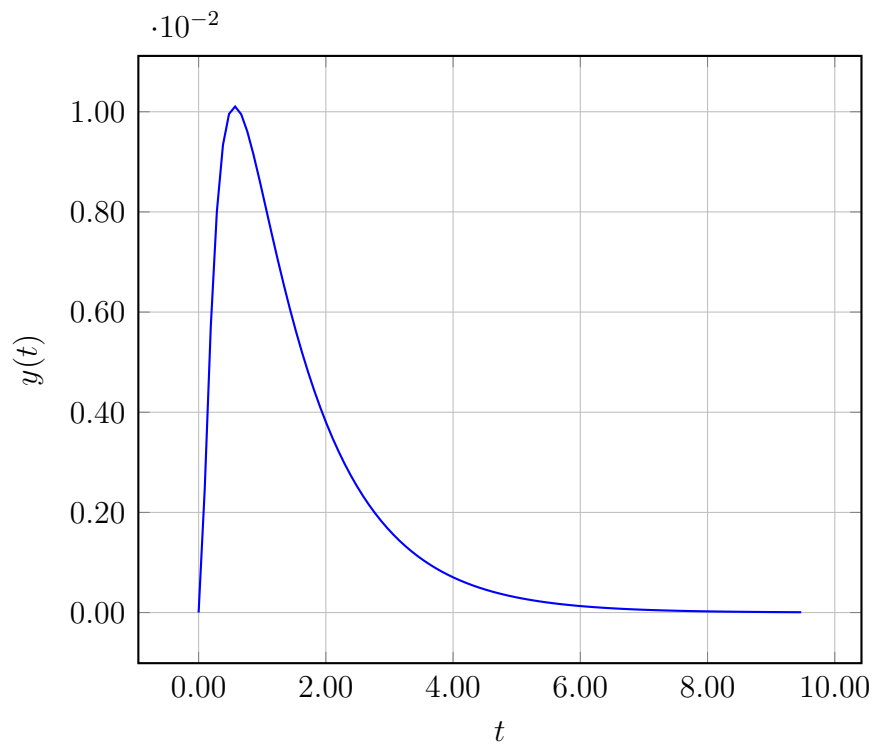1. (50 points) An open-loop transfer function is given as,
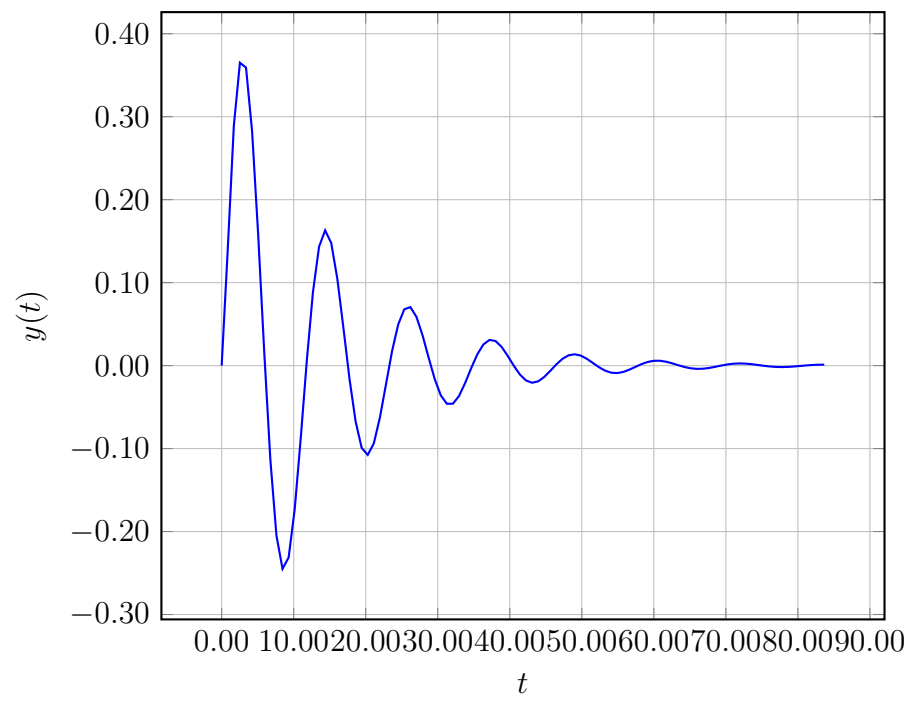
$$G(s) = \frac{1}{s^3 + 2.0s^2 + 3.05049s + 7.05049}$$

which of the following PI-controllers stabilizes the system in a closed-loop unit feedback structure?

A. $F(s) = 0.80302 + \frac{1.101}{s}$

B. $F(s) = -9.79799 + \frac{1.101}{s}$

C. $F(s) = -9.69698 + \frac{2.601}{s}$

D. $F(s) = 0.70201 + \frac{2.601}{s}$

E. $F(s) = -2.601 + \frac{0.55049}{s}$

2. (50 points) Which of the following does not overshoot?

A.

B.

Q	A
1	E
2	A