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```

function main
%r = tf([1],[1 0])
r = tf([1],[1 0 1])
g = tf([2 1],[1 3 2])
%c = tf([1 2],[1 0])
c = tf([1 2 0],[1 0 1])
h = feedback(g*c,1)
figure(1)
impulse(h*r,20)
hold on
impulse(r,20)

```

r =

$$\frac{1}{s^2 + 1}$$

#####

g =

$$\frac{2s + 1}{s^2 + 3s + 2}$$

#####

c =

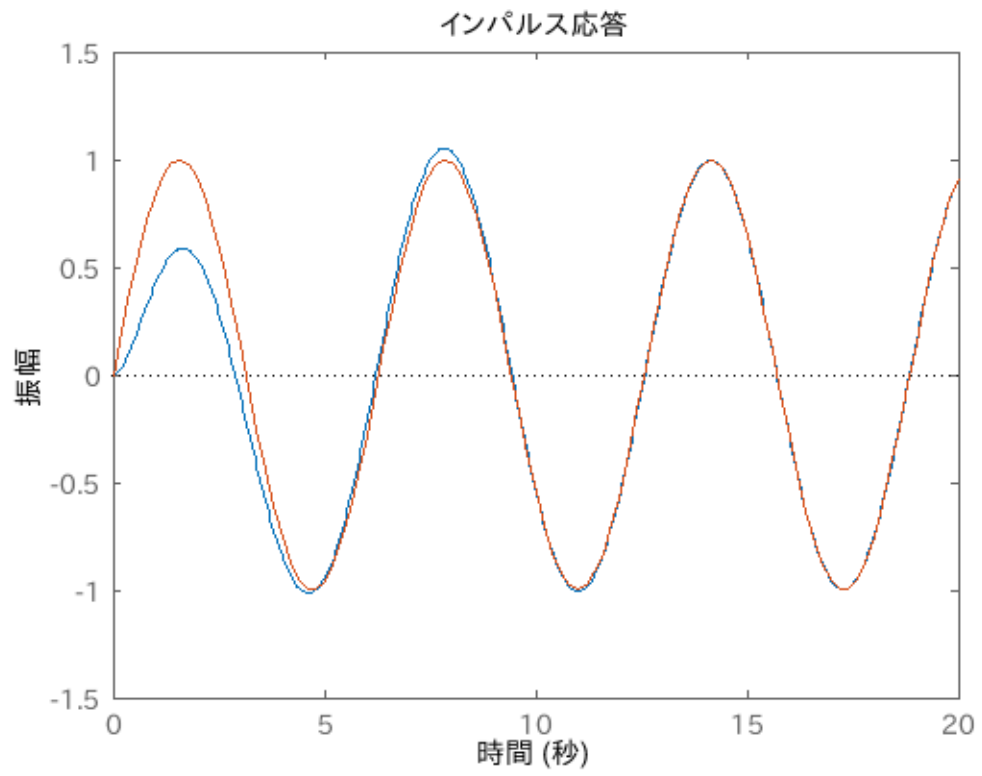
$$\frac{s^2 + 2s}{s^2 + 1}$$

#####

h =

$$\frac{2s^3 + 5s^2 + 2s}{s^4 + 5s^3 + 8s^2 + 5s + 2}$$

#####



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