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```
%%MATLAB FILE%%  
%Problem #5  
%Ogata B-10-4
```

```
num1=[0.5,1];  
den1=[1];  
num2=[10];  
den2=[1,2,0];
```

```
sys1=tf(num1,den1);  
sys2=tf(num2,den2);
```

```
sys_combine=series(sys1,sys2);  
sys=feedback(sys_combine,[1])
```

```
sys =
```

$$\frac{5s + 10}{s^2 + 7s + 10}$$

*Continuous-time transfer function.*

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