

chapter5_6 Analyzing instrumentation op-amps

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% Onwubolu, G. C.  
% Mechatronics: Principles & Applications  
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%  
% Chapter 5: Operational amplifiers  
%  
% Example 5.6 MATLAB's calculating power is demonstrated by analyzing  
% instrumentation op-amps  
  
'Example 5.6'           % Display label.  
% op-amps  
R1=5E+3;  
R2=20E+3;  
C=2E-6;  
  
% Commence computation  
'Gain:'  
Ho=abs(-R2/R1) %Vout/Vi=G  
'Speed'  
Wo=1/(C*R2)  
'Natural frequency'  
fo=1/(2*pi)*Wo  
'Roll off/on condition'  
db=20*log10(4)-3 %note that log10 is used instead of log  
pause
```