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VTIENG 051016.

Mechatronics.

~~051016~~

- 1) Command windows
- 2) clc
- 3) Syms t
- 4) $V(t) = 100 * \cos(120 * \pi * t)$
- 5) $i = diff(v)$
- 6) $C = 100 * (10^{-6})$
- 7) $L = diff^2 C$
- 8) $t = 0:0.1:0.35$
- 9) $Vn = Subs(v)$
- 10) $Vnn = double(Vn)$
- 11) $in = Subs(i)$
- 12) $inn = double(in)$
- 13) $P = V * i$
- 14) $Pn = Subs(P)$
- 15) $Pnn = double(Pn)$
- 16) $Plot [t, Vnn, 'b']$
- 17) hold on
- 18) $Plot [t, inn, 'r']$
- 19) hold on
- 20) $Plot [t, Pnn, 'k']$
- 21) x label ['Time (sec)']
- 22) y label ['variable']
- 23) grid on
- 24) grid minor
- 25) legend ['Voltage [V]', 'Current [A]', 'Power [P]']