

# Review: Phasors & Resonance

- At resonance
  - $Z$  is minimum ( $=R$ )
  - $I_{\max}$  is maximum ( $=V_{\text{gen,max}}/R$ )
  - $V_{\text{gen}}$  is in phase with  $I$
  - $X_L = X_C$      $V_L(t) = -V_C(t)$
- At lower frequencies
  - $X_C > X_L$      $V_{\text{gen}}$  lags  $I$
- At higher frequencies
  - $X_C < X_L$      $V_{\text{gen}}$  lead  $I$

