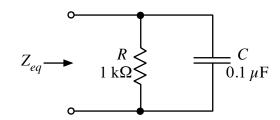
a. For the RC parallel combination shown at right, what is the angular frequency at which the *magnitude* of the equivalent impedance be equal to 250 Ω ?



 $\omega =$

b. What is the phase angle of the impedance at the frequency calculated in part (a) above?

 $\theta =$ _____

c. At what angular frequency is the *phase angle* of Z_{eq} equal to -45° ?

 $\omega =$ _____

d. What is the magnitude of the impedance at the frequency calculated in part (c) above?

 $|Z_{eq}| =$

e. What is the magnitude of the impedance as $\omega \to 0$?

 $\left|Z_{eq}\right| =$

f. What is the magnitude of the impedance as $\omega \to \infty$?

 $|Z_{eq}| =$