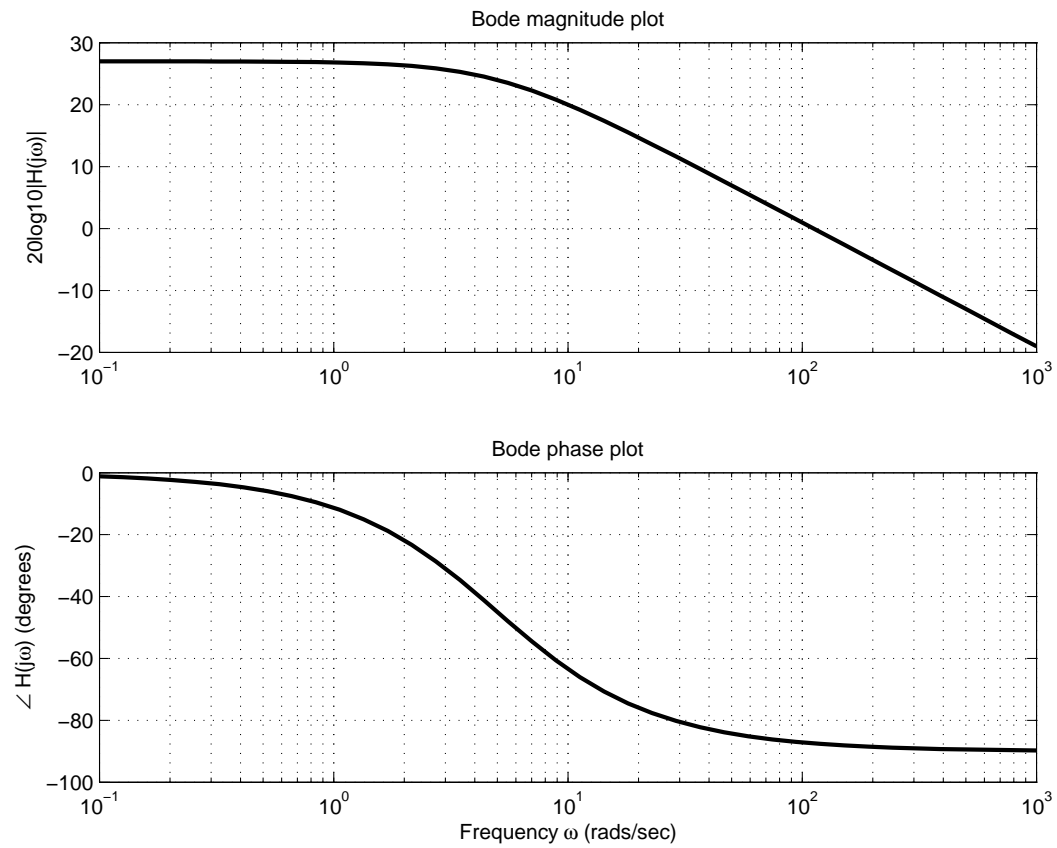


**Problem 1** (15 points)

A real LTI system has the Bode magnitude and phase plots shown below.



Determine the output of this system when the input is  $x(t) = e^{j10t}$  for all  $t$ .