SDOF calculator

Single Degree of Freedom Vibration Calculator:

Free vibration Forced vibration <----SUBMIT

Parameters:.....

* Mass [m]: (Default value = 1 unit)	5	lb
* Spring rate (Stiffness) [k]: (Default value = 3600 unit)	5	lbf/in
* Damping ratio (coefficient) [ζ]: (Default value = 0.1)	0.1	
* Harmonic input frequency [Ω]: (Default value = 10 Hz)	20	Hz

Result:.....give calculate>>>> Calculate

Cicular frequency [wn] =	19.649	rad/s
Natural frequency [fn] =	3.127	Hz
Period of oscilattion [T] =	0.32	seconds
Critical damping [cc] =	89.127	N s/m
Damping factor [c] =	8.913	N s/m
Damped natural angular frequency [wd] =	19.551	rad/s
Damped natural frequency [fd] =	3.112	Hz
Quality factor [Q] =	5.0	--
Transmissiblity [TR] =	0.041	--