

```

In[595]:= ClearAll[m, x, γ, k, driven, p, ω]

m = k = 1
γ = .1
driven = m x''[t] + γ x'[t] + k x[t] == EI ω t

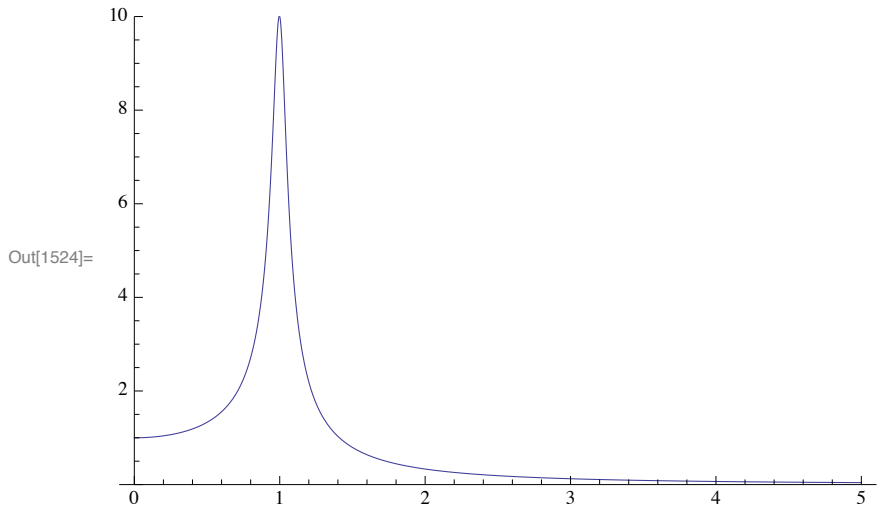
(*response at the driving frequency ansatz:*)
x[t_] = a EI ω (t-p)
solut = Solve[driven, a]
value1 = a /. solut[[1]]
Plot[value1, {ω, 0, 10}, PlotRange → {0, 10}]

```

```

In[1524]:= Plot[ ((k - m ω2)2 + (γ ω)2)-0.5, {ω, 0, 5}, PlotRange → {0, 10}]

```



```

In[1525]:= Plot[ 1 / ω ArcTan[γ ω / (k - m ω2)], {ω, 0, 5}, PlotRange → {-2, 2}]

```

