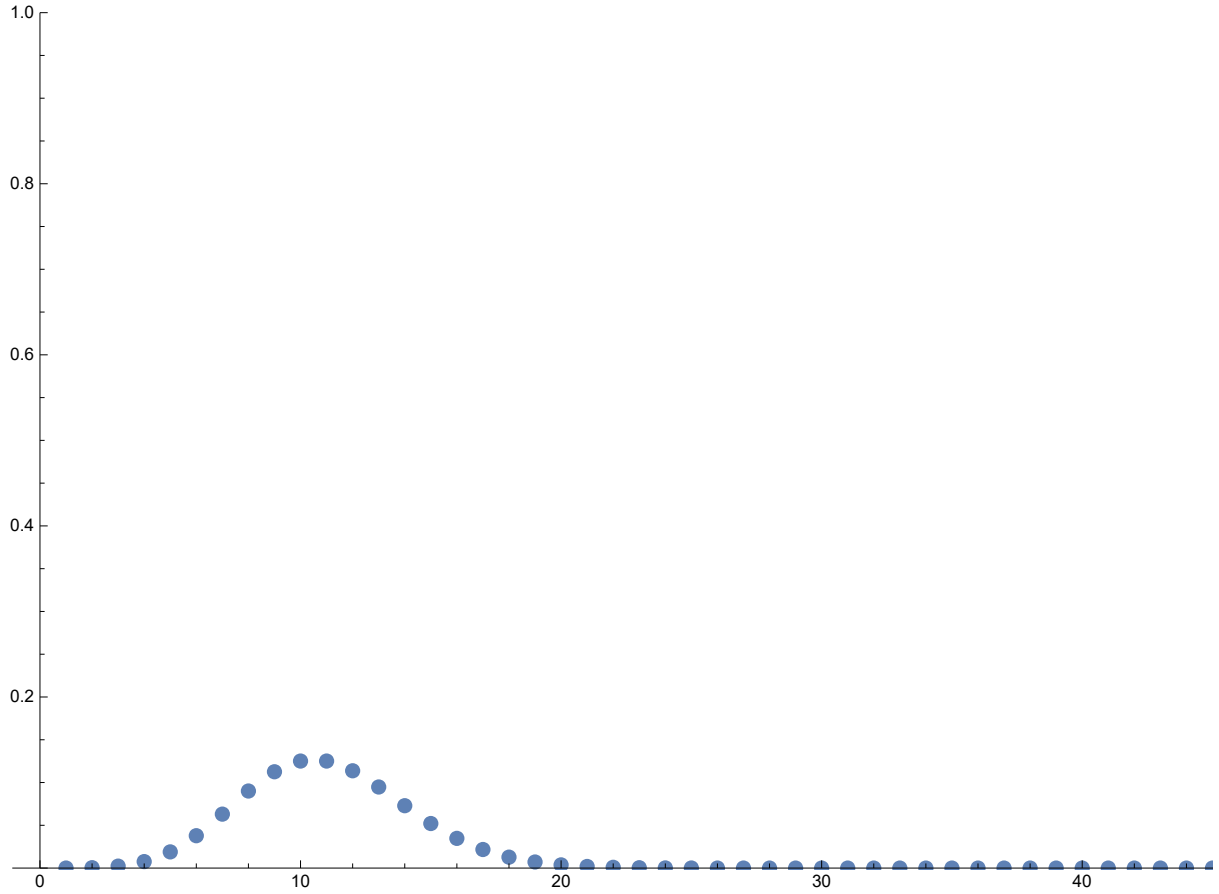
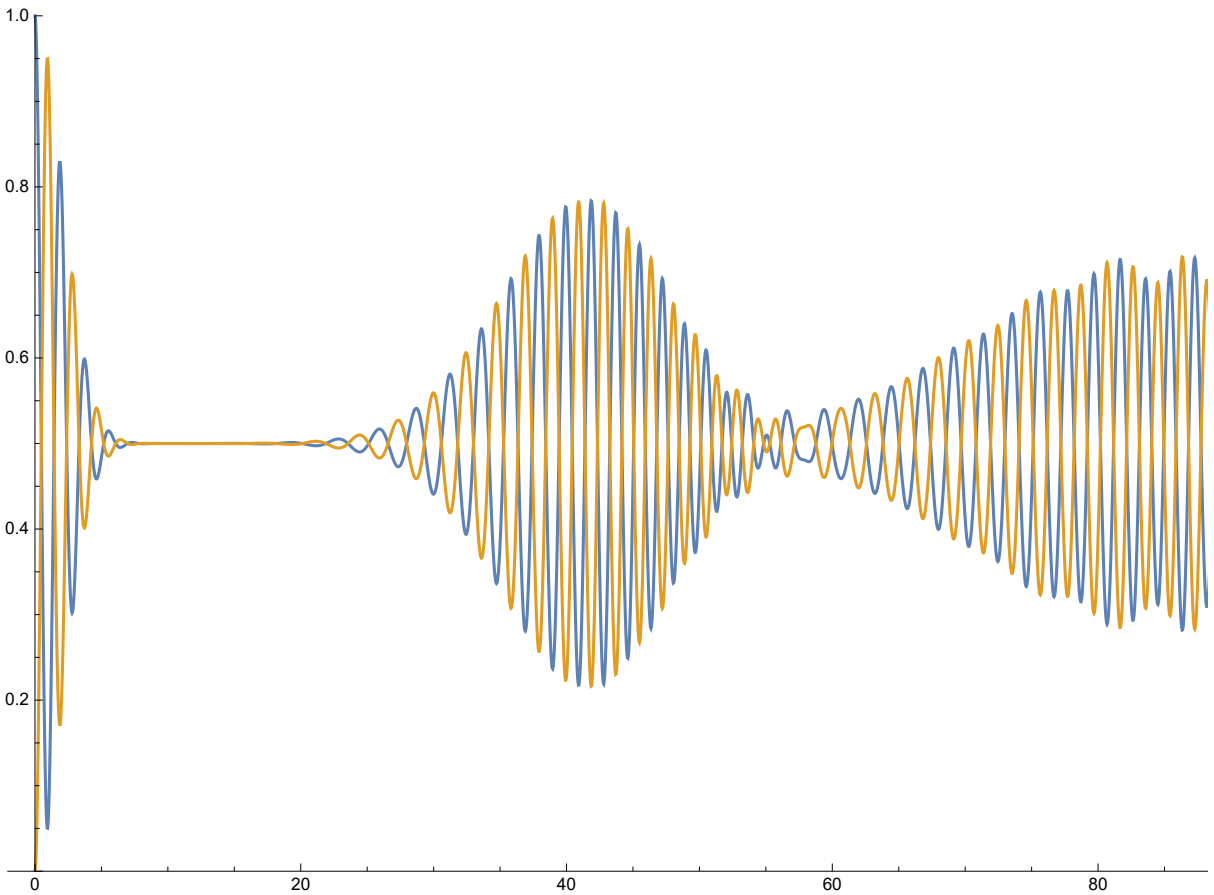
In[21]:=
```
Ω = 1;
nmax = 50;
Prob[α_, n_] := Exp[-Abs[α]^2] Abs[α]^(2 n) / n! (*distribucion de Poison *)
                exp··· valor absol··· valor absoluto
Pe[α_, t_] := (1 + Sum[Prob[α, n] * Cos[Sqrt[n + 1] Ω t], {n, 0, nmax}]) / 2
              suma                co··· raíz cuadrada
(*Probabilidad de estar en estado e*)
(* Probe[α_,t_]:=
 Sum[Prob[α,n-1]*Cos[Sqrt[n]Ω t/2]^2,{n,1,nmax}] expresion alternativa, no se usa*)
 suma               co··· raíz cuadrada
FPe[α_, w_] := FourierTransform[Pe[α, t], t, w] (*Transformada de Fourier de Pe  *)
               transformada de Fourier                                transformada de Fourier discr
g[α_, ww_] := Integrate[
              integra
  FPe[α, w] * Exp[- (w - ww)^2 / (2 * 0.0001)] / Sqrt[2 Pi * 0.0001], {w, -100, 100}]
              exponencial                        raíz c··· número pi
 (*Transformada integrada en una ventana gausiana de resolución 0.1 ,
 Falta cambiar la escala!*)
```

In[31]:=
```
α = Sqrt[10.];
    raíz cuadrada
ListPlot[Table[Prob[α, n], {n, 0, nmax}], PlotRange → {0, 1}]
represent··· tabla                        rango de representación
Plot[{Pe[α, t], 1 - Pe[α, t]}, {t, 0, 100}, PlotRange → {0, 1}]
representación gráfica                    rango de representación
ListPlot[Table[Evaluate[g[α, i]], {i, 0.1, 10, 1}]]
represent··· tabla  evalúa
```

Out[32]=



Out[33]=




General: Exp[−4050.] is too small to represent as a normalized machine number; precision may be lost.

General: Exp[−18050.] is too small to represent as a normalized machine number; precision may be lost.

General: Exp[−42050.] is too small to represent as a normalized machine number; precision may be lost.

General: Further output of General::munfl will be suppressed during this calculation.

Out[34]=