```
> restart;
> with(PDEtools):with(linalg):with(LinearAlgebra):with(plots):alias
  (w=w(z),phi=phi(t),psi=psi(t)):
> alpha:=-3;beta:=-30;phi:=simplify(KummerU(alpha,beta,z)):phi:=
  subs(BETA=beta,simplify(LaguerreL(-alpha,BETA-1,z))):
```

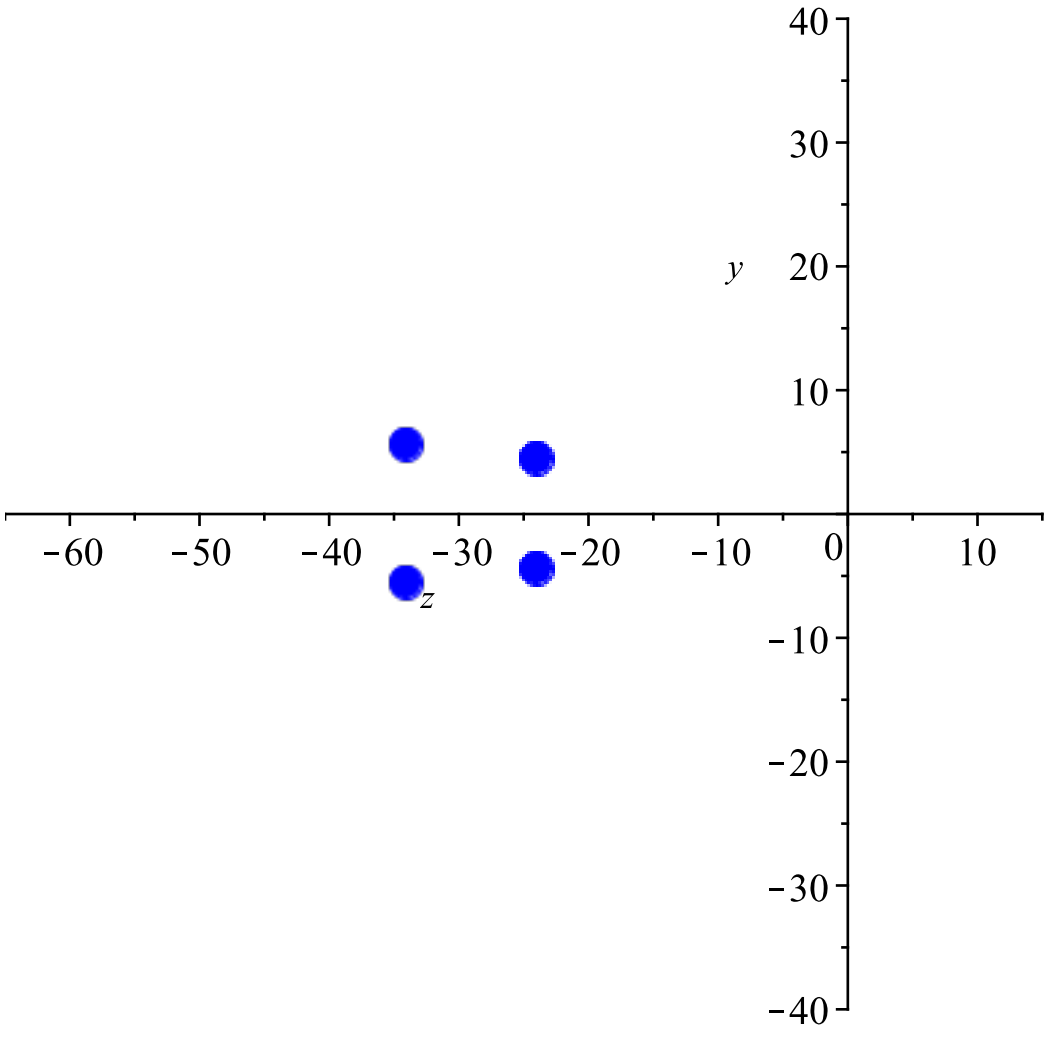
$$\alpha := -3$$

$$\beta := -30 \qquad (1)$$

```
> n:=2;
```

$$n := 2 \qquad (2)$$

```
> phi:for K from 1 to n do;l[K]:=diff(%,z)*z;od:wronskian([phi,seq
  (l[k],k=1..n-1)],z):for K from 1 to n do;h[K]:=Row(%,1);row(%%,2)
  ;wronskian(%*z,z):od:simplify(<seq(simplify(h[k]),k=1..n)>):tau:=
  det(%):op(1,sort(tau,z,descending)):coeffs(%):tau[n]:=factor(sort
  (expand(tau/(%))))*(z^(n/2*(1-n))):
> RootOf(tau[n],z):A:=evalf(allvalues(%)):
> complexplot([A],z=-65..15,y=-40..40,style=point,symbol=
  solidcircle,color=blue,symbolsize=25);
```




```
> restart;
> with(PDEtools):with(linalg):with(LinearAlgebra):with(plots):alias
  (w=w(z),phi=phi(t),psi=psi(t)):
```

```
> alpha:=-5;phi:=simplify(KummerU(alpha,beta,z)):phi:=simplify
  (LaguerreL(-alpha,beta-1,z)):
```

$$\alpha := -5 \tag{3}$$

```
> n:=3;
```

$$n := 3 \tag{4}$$

```
> phi:for K from 1 to n do;l[K]:=diff(%,z)*z;od:wronskian([phi,seq
  (l[k],k=1..n-1)],z):for K from 1 to n do;h[K]:=Row(%,1);row(%%,2)
  ;wronskian(%*z,z):od:simplify(<seq(simplify(h[k]),k=1..n)>):tau:=
  det(%):op(1,sort(tau,z,descending)):coeffs(%):tau[n]:=factor(sort
  (expand(tau/(%))))*(z^(n/2*(1-n))):
> RootOf(tau[n],z):A:=evalf(allvalues(%)):
> animate( complexplot, [[A],thickness=4,color=blue,symbolsize=25],
  beta=-10..10,style=point,symbol=solidcircle,frames=200);
```

$\beta = -10.$