```
>   restart;
>   with(orthopoly);
```

$$[G, H, L, P, T, U]$$

Polinoamele Legendre monice
```
>   for k from 0 to 3 do
>   pi[k](t)=sort(P(k,t)/lcoeff(P(k,t)));
>   end do;
```

$$\pi_0(t) = 1$$

$$\pi_1(t) = t$$

$$\pi_2(t) = t^2 - 1/3$$

$$\pi_3(t) = t^3 - 3/5\,t$$

Polinoamele Cebisev#1
```
>   for k from 0 to 3 do
>   pi[k](t)=sort(T(k,t));
>   end do;
```

$$\pi_0(t) = 1$$

$$\pi_1(t) = t$$

$$\pi_2(t) = 2\,t^2 - 1$$

$$\pi_3(t) = 4\,t^3 - 3\,t$$

Polinoamele Cebisev#2
```
>   for k from 0 to 3 do
>   pi[k](t)=sort(U(k,t));
>   end do;
```

$$\pi_0(t) = 1$$

$$\pi_1(t) = 2\,t$$

$$\pi_2(t) = 4\,t^2 - 1$$

$$\pi_3(t) = 8\,t^3 - 4\,t$$

Polinoamele Laguerre monice
```
>   for k from 0 to 3 do
>   pi[k](t)=sort(L(k,t)/lcoeff(L(k,t)));
>   end do;
```

$$\pi_0(t) = 1$$

$$\pi_1(t) = t - 1$$

$$\pi_2(t) = t^2 - 4\,t + 2$$

$$\pi_3(t) = t^3 - 9\,t^2 + 18\,t - 6$$

Polinoamele Hermite monice
```
>   for k from 0 to 3 do
>   pi[k](t)=sort(H(k,t)/lcoeff(H(k,t)));
>   end do;
```

$$\pi_0\left(t\right) = 1$$

$$\pi_1\left(t\right) = t$$

$$\pi_2\left(t\right) = t^2 - 1/2$$

$$\pi_3\left(t\right) = t^3 - 3/2\,t$$

Polinoame Jacobi cu $\alpha=1/2$ si $\beta=-1/2$

```
>  a:=1/2:  b:=-1/2;
```

$$b := -1/2$$

```
>  for k from 0 to 3 do
>  pi[k](t)=sort(expand(P(k,a,b,t))/lcoeff(expand(P(k,a,b,t))));
>  end do;
```

$$\pi_0\left(t\right) = 1$$

$$\pi_1\left(t\right) = t + 1/2$$

$$\pi_2\left(t\right) = t^2 + 1/2\,t - 1/4$$

$$\pi_3\left(t\right) = t^3 + 1/2\,t^2 - 1/2\,t - 1/8$$