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In[*]:= inclexclambdau[{}, λ, u, "even"]
inclexclambdau[{}, λ, u, "odd"]
inclexclambdau[{0}, λ, u, "even"]
inclexclambdau[{0}, λ, u, "odd"]
inclexclambdau[ $\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$ , λ, u, "even"]
inclexclambdau[ $\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$ , λ, u, "odd"]
inclexclambdau[ $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$ , λ, u, "even"]
inclexclambdau[ $\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$ , λ, u, "odd"]
inclexclambdau[ $\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$ , λ, u, "even"]
inclexclambdau[ $\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$ , λ, u, "odd"]

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Out[*]= 1

Out[*]= 1

Out[*]= λ

Out[*]= λ

Out[*]= λ²

Out[*]= λ²

Out[*]= (-1 + λ) λ

Out[*]= (-1 + λ) λ

Out[*]= u - λ + λ²

Out[*]= u - λ + λ²

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In[*]:= inclexclambdau[ $\begin{pmatrix} 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 1 & 0 \end{pmatrix}$ , λ, u, "even"]
conedeletionthreshold[adjsignedthreshold[{1, 1}], λ, u, "zerofree"]
inclexclambdau[ $\begin{pmatrix} 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 1 & 0 \end{pmatrix}$ , λ, u, "odd"]
conedeletionthreshold[adjsignedthreshold[{1, 1}], λ, u, "addzero"]
Out[*]= (-2 + λ) (-1 + λ) λ
Out[*]= (-2 + λ) (-1 + λ) λ
Out[*]= (-2 + λ) (-1 + λ) λ
Out[*]= (-2 + λ) (-1 + λ) λ

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In[*]:= inclexclambdau[ $\begin{pmatrix} 0 & -1 & 1 \\ -1 & 0 & 1 \\ 1 & 1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "even"]

conedeletionthreshold[adjsignedthreshold[{-1, 1}],  $\lambda$ , u, "zerofree"]

inclexclambdau[ $\begin{pmatrix} 0 & -1 & 1 \\ -1 & 0 & 1 \\ 1 & 1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "odd"]

conedeletionthreshold[adjsignedthreshold[{-1, 1}],  $\lambda$ , u, "addzero"]

Out[*]:=  $-2u + 3\lambda + u\lambda - 3\lambda^2 + \lambda^3$ 

Out[*]:=  $-2u + 3\lambda + u\lambda - 3\lambda^2 + \lambda^3$ 

Out[*]:=  $-1 - 2u + 3\lambda + u\lambda - 3\lambda^2 + \lambda^3$ 

Out[*]:=  $-1 - 2u + 3\lambda + u\lambda - 3\lambda^2 + \lambda^3$ 

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In[*]:= inclexclambdau[ $\begin{pmatrix} 0 & 1 & -1 \\ 1 & 0 & -1 \\ -1 & -1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "even"]

conedeletionthreshold[adjsignedthreshold[{1, -1}],  $\lambda$ , u, "zerofree"]

inclexclambdau[ $\begin{pmatrix} 0 & 1 & -1 \\ 1 & 0 & -1 \\ -1 & -1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "odd"]

conedeletionthreshold[adjsignedthreshold[{1, -1}],  $\lambda$ , u, "addzero"]

Out[*]:=  $(-1 + \lambda) (2u - 2\lambda + \lambda^2)$ 

Out[*]:=  $(-1 + \lambda) (2u - 2\lambda + \lambda^2)$ 

Out[*]:=  $(-1 + \lambda) (2u - 2\lambda + \lambda^2)$ 

Out[*]:=  $(-1 + \lambda) (2u - 2\lambda + \lambda^2)$ 

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In[*]:= inclexclambdau[ $\begin{pmatrix} 0 & -1 & -1 \\ -1 & 0 & -1 \\ -1 & -1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "even"]

conedeletionthreshold[adjsignedthreshold[{-1, -1}],  $\lambda$ , u, "zerofree"]

inclexclambdau[ $\begin{pmatrix} 0 & -1 & -1 \\ -1 & 0 & -1 \\ -1 & -1 & 0 \end{pmatrix}$ ,  $\lambda$ , u, "odd"]

conedeletionthreshold[adjsignedthreshold[{-1, -1}],  $\lambda$ , u, "addzero"]

Out[*]=  $-3 u + 3 \lambda + 3 u \lambda - 3 \lambda^2 + \lambda^3$ 

Out[*]=  $-3 u + 3 \lambda + 3 u \lambda - 3 \lambda^2 + \lambda^3$ 

Out[*]=  $(-1 + \lambda) (1 + 3 u - 2 \lambda + \lambda^2)$ 

Out[*]=  $(-1 + \lambda) (1 + 3 u - 2 \lambda + \lambda^2)$ 

```

[illegible]

$$\text{In}[*]:= \text{inclexclambdau}\left[\begin{pmatrix} 0 & 0 & 1 & -1 \\ 0 & 0 & 1 & -1 \\ 1 & 1 & 0 & -1 \\ -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"even"}\right]$$

`conedeletionthreshold[adjsignedthreshold[{0, 1, -1}], λ, u, "zerofree"]`

$$\text{inclexclambdau}\left[\begin{pmatrix} 0 & 0 & 1 & -1 \\ 0 & 0 & 1 & -1 \\ 1 & 1 & 0 & -1 \\ -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"odd"}\right]$$

`conedeletionthreshold[adjsignedthreshold[{0, 1, -1}], λ, u, "addzero"]`

$$\text{Out}[*]= (-1 + \lambda) (-4 u + 4 \lambda + 3 u \lambda - 4 \lambda^2 + \lambda^3)$$

$$\text{Out}[*]= (-1 + \lambda) (-4 u + 4 \lambda + 3 u \lambda - 4 \lambda^2 + \lambda^3)$$

$$\text{Out}[*]= (-1 + \lambda) (-4 u + 4 \lambda + 3 u \lambda - 4 \lambda^2 + \lambda^3)$$

$$\text{Out}[*]= (-1 + \lambda) (-4 u + 4 \lambda + 3 u \lambda - 4 \lambda^2 + \lambda^3)$$

$$\text{In}[*]:= \text{inclexclambdau}\left[\begin{pmatrix} 0 & -1 & 1 & -1 \\ -1 & 0 & 1 & -1 \\ 1 & 1 & 0 & -1 \\ -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"even"}\right]$$

`conedeletionthreshold[adjsignedthreshold[{-1, 1, -1}], λ, u, "zerofree"]`

$$\text{inclexclambdau}\left[\begin{pmatrix} 0 & -1 & 1 & -1 \\ -1 & 0 & 1 & -1 \\ 1 & 1 & 0 & -1 \\ -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"odd"}\right]$$

`conedeletionthreshold[adjsignedthreshold[{-1, 1, -1}], λ, u, "addzero"]`

$$\text{Out}[*]= 10 u + u^2 - 10 \lambda - 13 u \lambda + 13 \lambda^2 + 4 u \lambda^2 - 6 \lambda^3 + \lambda^4$$

$$\text{Out}[*]= 10 u + u^2 - 10 \lambda - 13 u \lambda + 13 \lambda^2 + 4 u \lambda^2 - 6 \lambda^3 + \lambda^4$$

$$\text{Out}[*]= 4 + 10 u + u^2 - 12 \lambda - 13 u \lambda + 13 \lambda^2 + 4 u \lambda^2 - 6 \lambda^3 + \lambda^4$$

$$\text{Out}[*]= 4 + 10 u + u^2 - 12 \lambda - 13 u \lambda + 13 \lambda^2 + 4 u \lambda^2 - 6 \lambda^3 + \lambda^4$$

$$\text{In[*]:= inclexclambda} \left[\begin{pmatrix} 0 & -1 & 1 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & -1 \\ -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"even"} \right]$$

conedeletionthreshold[adjsignedthreshold[{-1, 1, 0, -1}], λ, u, "zerofree"]

$$\text{inclexclambda} \left[\begin{pmatrix} 0 & -1 & 1 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & -1 \\ -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"odd"} \right]$$

conedeletionthreshold[adjsignedthreshold[{-1, 1, 0, -1}], λ, u, "addzero"]

$$\text{Out[*]= } -10u - 3u^2 + 10\lambda + 26u\lambda + 2u^2\lambda - 23\lambda^2 - 20u\lambda^2 + 19\lambda^3 + 5u\lambda^3 - 7\lambda^4 + \lambda^5$$

$$\text{Out[*]= } -10u - 3u^2 + 10\lambda + 26u\lambda + 2u^2\lambda - 23\lambda^2 - 20u\lambda^2 + 19\lambda^3 + 5u\lambda^3 - 7\lambda^4 + \lambda^5$$

$$\text{Out[*]= } -4 - 11u - 3u^2 + 16\lambda + 26u\lambda + 2u^2\lambda - 25\lambda^2 - 20u\lambda^2 + 19\lambda^3 + 5u\lambda^3 - 7\lambda^4 + \lambda^5$$

$$\text{Out[*]= } -4 - 11u - 3u^2 + 16\lambda + 26u\lambda + 2u^2\lambda - 25\lambda^2 - 20u\lambda^2 + 19\lambda^3 + 5u\lambda^3 - 7\lambda^4 + \lambda^5$$

$$\text{In[*]:= inclexclambda} \left[\begin{pmatrix} 0 & -1 & -1 & 1 & 0 & -1 \\ -1 & 0 & -1 & 1 & 0 & -1 \\ -1 & -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & -1 \\ -1 & -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"even"} \right]$$

conedeletionthreshold[adjsignedthreshold[{-1, -1, 1, 0, -1}], λ, u, "zerofree"]

$$\text{inclexclambda} \left[\begin{pmatrix} 0 & -1 & -1 & 1 & 0 & -1 \\ -1 & 0 & -1 & 1 & 0 & -1 \\ -1 & -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & -1 \\ -1 & -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"odd"} \right]$$

conedeletionthreshold[adjsignedthreshold[{-1, -1, 1, 0, -1}], λ, u, "addzero"]

$$\text{Out[*]= } 62u + 27u^2 - 62\lambda - 172u\lambda - 33u^2\lambda + 145\lambda^2 + 157u\lambda^2 + 9u^2\lambda^2 - 125\lambda^3 - 58u\lambda^3 + 52\lambda^4 + 8u\lambda^4 - 11\lambda^5 + \lambda^6$$

$$\text{Out[*]= } 62u + 27u^2 - 62\lambda - 172u\lambda - 33u^2\lambda + 145\lambda^2 + 157u\lambda^2 + 9u^2\lambda^2 - 125\lambda^3 - 58u\lambda^3 + 52\lambda^4 + 8u\lambda^4 - 11\lambda^5 + \lambda^6$$

$$\text{Out[*]= } 38 + 73u + 27u^2 - 133\lambda - 180u\lambda - 33u^2\lambda + 185\lambda^2 + 157u\lambda^2 + 9u^2\lambda^2 - 132\lambda^3 - 58u\lambda^3 + 52\lambda^4 + 8u\lambda^4 - 11\lambda^5 + \lambda^6$$

$$\text{Out[*]= } 38 + 73u + 27u^2 - 133\lambda - 180u\lambda - 33u^2\lambda + 185\lambda^2 + 157u\lambda^2 + 9u^2\lambda^2 - 132\lambda^3 - 58u\lambda^3 + 52\lambda^4 + 8u\lambda^4 - 11\lambda^5 + \lambda^6$$

```

In[*]:= inclexclambdau[ConstantArray[1, {6, 6}] - IdentityMatrix[6], λ, u, "even"] //
  AbsoluteTiming
conedeletionthreshold[adjsignedthreshold[ConstantArray[1, 5]],
  λ, u, "zerofree"] // AbsoluteTiming
inclexclambdau[ConstantArray[1, {6, 6}] - IdentityMatrix[6], λ, u, "odd"] //
  AbsoluteTiming
conedeletionthreshold[
  adjsignedthreshold[ConstantArray[1, 5]], λ, u, "addzero"] // AbsoluteTiming

Out[*]:= {7.66901, (-5 + λ) (-4 + λ) (-3 + λ) (-2 + λ) (-1 + λ) λ}

Out[*]:= {0.003105, (-5 + λ) (-4 + λ) (-3 + λ) (-2 + λ) (-1 + λ) λ}

Out[*]:= {7.69052, (-5 + λ) (-4 + λ) (-3 + λ) (-2 + λ) (-1 + λ) λ}

Out[*]:= {0.007951, (-5 + λ) (-4 + λ) (-3 + λ) (-2 + λ) (-1 + λ) λ}

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In[*]:= inclexclambdau[ConstantArray[-1, {6, 6}] + IdentityMatrix[6], λ, u, "even"] //
  AbsoluteTiming
conedeletionthreshold[adjsignedthreshold[ConstantArray[-1, 5]],
  λ, u, "zerofree"] // AbsoluteTiming
inclexclambdau[ConstantArray[-1, {6, 6}] + IdentityMatrix[6], λ, u, "odd"] //
  AbsoluteTiming
conedeletionthreshold[
  adjsignedthreshold[ConstantArray[-1, 5]], λ, u, "addzero"] // AbsoluteTiming

Out[*]:= {12.5401, 541 u + 285 u2 + 15 u3 - 541 λ - 1020 u λ - 225 u2 λ +
  735 λ2 + 600 u λ2 + 45 u2 λ2 - 390 λ3 - 150 u λ3 + 105 λ4 + 15 u λ4 - 15 λ5 + λ6}}

Out[*]:= {0.002553, 541 u + 285 u2 + 15 u3 - 541 λ - 1020 u λ - 225 u2 λ +
  735 λ2 + 600 u λ2 + 45 u2 λ2 - 390 λ3 - 150 u λ3 + 105 λ4 + 15 u λ4 - 15 λ5 + λ6}}

Out[*]:= {12.4964, 431 + 706 u + 285 u2 + 15 u3 - 1012 λ - 1080 u λ - 225 u2 λ +
  900 λ2 + 600 u λ2 + 45 u2 λ2 - 410 λ3 - 150 u λ3 + 105 λ4 + 15 u λ4 - 15 λ5 + λ6}}

Out[*]:= {0.006391, 431 + 706 u + 285 u2 + 15 u3 - 1012 λ - 1080 u λ - 225 u2 λ +
  900 λ2 + 600 u λ2 + 45 u2 λ2 - 410 λ3 - 150 u λ3 + 105 λ4 + 15 u λ4 - 15 λ5 + λ6}}

```

$$In[*]:= \text{inclexclambdau} \left[\begin{pmatrix} 0 & -1 & 1 & 1 & -1 & -1 \\ -1 & 0 & 1 & 1 & -1 & -1 \\ 1 & 1 & 0 & 1 & -1 & -1 \\ 1 & 1 & 1 & 0 & -1 & -1 \\ -1 & -1 & -1 & -1 & 0 & -1 \\ -1 & -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"even"} \right]$$

`conedeletionthreshold[adjsignedthreshold[{-1, 1, 1, -1, -1}], λ, u, "zerofree"]`

$$\text{inclexclambdau} \left[\begin{pmatrix} 0 & -1 & 1 & 1 & -1 & -1 \\ -1 & 0 & 1 & 1 & -1 & -1 \\ 1 & 1 & 0 & 1 & -1 & -1 \\ 1 & 1 & 1 & 0 & -1 & -1 \\ -1 & -1 & -1 & -1 & 0 & -1 \\ -1 & -1 & -1 & -1 & -1 & 0 \end{pmatrix}, \lambda, u, \text{"odd"} \right]$$

`conedeletionthreshold[adjsignedthreshold[{-1, 1, 1, -1, -1}], λ, u, "addzero"]`

$$Out[*]= 310 u + 120 u^2 + 2 u^3 - 310 \lambda - 599 u \lambda - 91 u^2 \lambda + 479 \lambda^2 + \\ 381 u \lambda^2 + 17 u^2 \lambda^2 - 296 \lambda^3 - 102 u \lambda^3 + 93 \lambda^4 + 10 u \lambda^4 - 15 \lambda^5 + \lambda^6$$

$$Out[*]= 310 u + 120 u^2 + 2 u^3 - 310 \lambda - 599 u \lambda - 91 u^2 \lambda + 479 \lambda^2 + \\ 381 u \lambda^2 + 17 u^2 \lambda^2 - 296 \lambda^3 - 102 u \lambda^3 + 93 \lambda^4 + 10 u \lambda^4 - 15 \lambda^5 + \lambda^6$$

$$Out[*]= 192 + 348 u + 120 u^2 + 2 u^3 - 517 \lambda - 611 u \lambda - 91 u^2 \lambda + 550 \lambda^2 + \\ 381 u \lambda^2 + 17 u^2 \lambda^2 - 304 \lambda^3 - 102 u \lambda^3 + 93 \lambda^4 + 10 u \lambda^4 - 15 \lambda^5 + \lambda^6$$

$$Out[*]= 192 + 348 u + 120 u^2 + 2 u^3 - 517 \lambda - 611 u \lambda - 91 u^2 \lambda + 550 \lambda^2 + \\ 381 u \lambda^2 + 17 u^2 \lambda^2 - 304 \lambda^3 - 102 u \lambda^3 + 93 \lambda^4 + 10 u \lambda^4 - 15 \lambda^5 + \lambda^6$$

```

In[*]:= inclexclambdau[ConstantArray[-1, {7, 7}] + IdentityMatrix[7], λ, u, "even"] //
  AbsoluteTiming
conedeletionthreshold[adjsignedthreshold[ConstantArray[-1, 6]],
  λ, u, "zerofree"] // AbsoluteTiming
inclexclambdau[ConstantArray[-1, {7, 7}] + IdentityMatrix[7], λ, u, "odd"] //
  AbsoluteTiming
conedeletionthreshold[
  adjsignedthreshold[ConstantArray[-1, 6]], λ, u, "addzero"] // AbsoluteTiming

Out[*]:= {995.598,
  -4683 u - 2940 u2 - 315 u3 + 4683 λ + 9667 u λ + 2940 u2 λ + 105 u3 λ - 6727 λ2 - 6510 u λ2 -
  945 u2 λ2 + 3885 λ3 + 2030 u λ3 + 105 u2 λ3 - 1190 λ4 - 315 u λ4 + 210 λ5 + 21 u λ5 - 21 λ6 + λ7}

Out[*]:= {0.005108,
  -4683 u - 2940 u2 - 315 u3 + 4683 λ + 9667 u λ + 2940 u2 λ + 105 u3 λ - 6727 λ2 - 6510 u λ2 -
  945 u2 λ2 + 3885 λ3 + 2030 u λ3 + 105 u2 λ3 - 1190 λ4 - 315 u λ4 + 210 λ5 + 21 u λ5 - 21 λ6 + λ7}

Out[*]:= {1007.61, -4208 - 6944 u - 3045 u2 - 315 u3 + 9961 λ +
  11 032 u λ + 2940 u2 λ + 105 u3 λ - 9058 λ2 - 6720 u λ2 - 945 u2 λ2 + 4340 λ3 +
  2030 u λ3 + 105 u2 λ3 - 1225 λ4 - 315 u λ4 + 210 λ5 + 21 u λ5 - 21 λ6 + λ7}

Out[*]:= {0.015043, -4208 - 6944 u - 3045 u2 - 315 u3 + 9961 λ +
  11 032 u λ + 2940 u2 λ + 105 u3 λ - 9058 λ2 - 6720 u λ2 - 945 u2 λ2 + 4340 λ3 +
  2030 u λ3 + 105 u2 λ3 - 1225 λ4 - 315 u λ4 + 210 λ5 + 21 u λ5 - 21 λ6 + λ7}

```


$$\text{In[*]:= inclexclambda} \left[\begin{pmatrix} 0 & -1 & 0 & 1 & 1 & -1 & 0 \\ -1 & 0 & 0 & 1 & 1 & -1 & 0 \\ 0 & 0 & 0 & 1 & 1 & -1 & 0 \\ 1 & 1 & 1 & 0 & 1 & -1 & 0 \\ 1 & 1 & 1 & 1 & 0 & -1 & 0 \\ -1 & -1 & -1 & -1 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \lambda, u, \text{"even"} \right]$$

`conedeletionthreshold[
adjsignedthreshold[{-1, 0, 1, 1, -1, 0}], λ, u, "zerofree"]`

$$\text{inclexclambda} \left[\begin{pmatrix} 0 & -1 & 0 & 1 & 1 & -1 & 0 \\ -1 & 0 & 0 & 1 & 1 & -1 & 0 \\ 0 & 0 & 0 & 1 & 1 & -1 & 0 \\ 1 & 1 & 1 & 0 & 1 & -1 & 0 \\ 1 & 1 & 1 & 1 & 0 & -1 & 0 \\ -1 & -1 & -1 & -1 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \lambda, u, \text{"odd"} \right]$$

`conedeletionthreshold[adjsignedthreshold[{-1, 0, 1, 1, -1, 0}], λ, u, "addzero"]`

$$\text{Out[*]:= } \lambda \left(126 u + 24 u^2 - 126 \lambda - 253 u \lambda - 17 u^2 \lambda + \right. \\ \left. 237 \lambda^2 + 176 u \lambda^2 + 3 u^2 \lambda^2 - 179 \lambda^3 - 53 u \lambda^3 + 68 \lambda^4 + 6 u \lambda^4 - 13 \lambda^5 + \lambda^6 \right)$$

$$\text{Out[*]:= } \lambda \left(126 u + 24 u^2 - 126 \lambda - 253 u \lambda - 17 u^2 \lambda + \right. \\ \left. 237 \lambda^2 + 176 u \lambda^2 + 3 u^2 \lambda^2 - 179 \lambda^3 - 53 u \lambda^3 + 68 \lambda^4 + 6 u \lambda^4 - 13 \lambda^5 + \lambda^6 \right)$$

$$\text{Out[*]:= } \lambda \left(54 + 136 u + 24 u^2 - 189 \lambda - 257 u \lambda - 17 u^2 \lambda + \right. \\ \left. 261 \lambda^2 + 176 u \lambda^2 + 3 u^2 \lambda^2 - 182 \lambda^3 - 53 u \lambda^3 + 68 \lambda^4 + 6 u \lambda^4 - 13 \lambda^5 + \lambda^6 \right)$$

$$\text{Out[*]:= } \lambda \left(54 + 136 u + 24 u^2 - 189 \lambda - 257 u \lambda - 17 u^2 \lambda + \right. \\ \left. 261 \lambda^2 + 176 u \lambda^2 + 3 u^2 \lambda^2 - 182 \lambda^3 - 53 u \lambda^3 + 68 \lambda^4 + 6 u \lambda^4 - 13 \lambda^5 + \lambda^6 \right)$$