Table # initial

pots: pot #0: new:

symbol $b_2: (0, \infty)$ symbol $b_1: (0, \infty)$

all:

symbol $b_2: (0, \infty)$ symbol $b_1: (0, \infty)$

		x_0	x_1	x_2	x_3
x_2	b_1	a_{11}	a_{12}	1	0
x_3	b_2	a_{21}	a_{22}	0	1
Ψ	0	c_1	c_2	0	0

```
Table \#0
```

Moving out basis: x_2 from line: 0

Moving to basis: x_0

pots: pot #0: new: symbol $a_{11}:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $c_1:(-\infty,0)$ $-c_1 + c_2 \geqslant 0$ $a_{11}b_2 - a_{21}b_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1:(-\infty,0)$ symbol $a_{21}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $a_{11}b_2 - a_{21}b_1 \geqslant 0$ pot #1: new: symbol $a_{11}:(0,\infty)$ symbol $a_{21}: (-\infty, 0]$ symbol $c_1: (-\infty, 0)$ $-c_1 + c_2 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{21}:(-\infty,0]$

 $-c_1 + c_2 \geqslant 0$

		x_0	x_1	x_2	x_3
x_0	$\frac{b_1}{a_{11}}$	1	$\frac{a_{12}}{a_{11}}$	$\frac{1}{a_{11}}$	0
x_3	$b_2 - \frac{a_{21}b_1}{a_{11}}$	0	$a_{22} - \frac{a_{12}a_{21}}{a_{11}}$	$-\frac{a_{21}}{a_{11}}$	1
Ψ	$-rac{b_{1}c_{1}}{a_{11}}$	0	$c_2 - \frac{a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

```
Moving out basis: x_0 from line: 0
Moving to basis: x_1
pots:
pot #0:
new:
symbol a_{12}:(0,\infty)
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{21}:(0,\infty)
symbol a_{12}:(0,\infty)
-c_1 + c_2 \geqslant 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
pot #1:
new:
symbol a_{12}:(0,\infty)
-a_{11}c_2 + a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{21}:(0,\infty)
symbol a_{12}:(0,\infty)
-c_1 + c_2 \geqslant 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} \geqslant 0
pot #2:
new:
symbol a_{12}:(0,\infty)
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
```

symbol $c_1:(-\infty,0)$

Table #0.0

symbol $a_{21}: (-\infty, 0]$ symbol $a_{12}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{11}c_2 + a_{12}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $a_{12}b_2 - a_{22}b_1 \geqslant 0$ pot #3: new: symbol $a_{12}:(0,\infty)$ $-a_{11}c_2 + a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1:(-\infty,0)$ symbol $a_{21}:(-\infty,0]$ symbol $a_{12}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{11}c_2 + a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{b_1}{a_{12}}$	$\frac{a_{11}}{a_{12}}$	1	$\frac{1}{a_{12}}$	0
x_3	$\frac{a_{12}b_2 - a_{22}b_1}{a_{12}}$	$\frac{-a_{11}a_{22} + a_{12}a_{21}}{a_{12}}$	0	$-\frac{a_{22}}{a_{12}}$	1
Ψ	$-\frac{b_1c_2}{a_{12}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{12}}$	0	$-\frac{c_2}{a_{12}}$	0

$$x_0 = 0$$

$$x_1 = \frac{b_1}{a_{12}}$$

$$x_2 = 0$$

$$x_3 = \frac{a_{12}b_2 - a_{22}b_1}{a_{12}}$$

$$\Psi = -\frac{b_1c_2}{a_{12}}$$

```
Moving out basis: x_3 from line: 1
Moving to basis: x_1
pots:
pot #0:
new:
symbol a_{12}:(0,\infty)
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{21}:(0,\infty)
symbol a_{12}:(0,\infty)
-c_1 + c_2 \geqslant 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
pot #1:
new:
symbol a_{12}: (-\infty, 0]
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{21}:(0,\infty)
symbol a_{12}: (-\infty, 0]
-c_1 + c_2 \geqslant 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
pot #2:
new:
symbol a_{12}:(0,\infty)
-a_{11}c_2 + a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
```

symbol $c_1:(-\infty,0)$

Table #0.1

symbol $a_{21}:(-\infty,0]$ symbol $a_{12}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{11}c_2 + a_{12}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ pot #3: new: symbol $a_{12}:(-\infty,0]$ $-a_{11}c_2 + a_{12}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{21}: (-\infty, 0]$ symbol $a_{12}:(-\infty,0]$ $-c_1 + c_2 \geqslant 0$ $-a_{11}c_2 + a_{12}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$

		x_0	x_1	x_2	x_3
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

```
Table \#0.1.0
```

Moving out basis: x_0 from line: 0

Moving to basis: x_2

pots: pot #0:

new:

symbol $a_{22}:(0,\infty)$

 $-a_{21}c_2 + a_{22}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1:(-\infty,0)$

symbol $a_{21}:(0,\infty)$

symbol $a_{12}:(0,\infty)$

symbol a_{12} : $(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

pot #1:

new:

symbol $a_{22}:(0,\infty)$

 $-a_{21}c_2 + a_{22}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1:(-\infty,0)$

symbol $a_{21}:(0,\infty)$

symbol $a_{12}:(-\infty,0]$

symbol $a_{22}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

		x_0	x_1	x_2	x_3
x_2	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{22}}$	$\frac{a_{11}a_{22} - a_{12}a_{21}}{a_{22}}$	0	1	$-\frac{a_{12}}{a_{22}}$
x_1	$\frac{b_2}{a_{22}}$	$\frac{a_{21}}{a_{22}}$	1	0	$\frac{1}{a_{22}}$
Ψ	$-\frac{b_{2}c_{2}}{a_{22}}$	$\frac{-a_{21}c_2 + a_{22}c_1}{a_{22}}$	0	0	$-\frac{c_2}{a_{22}}$

Solution:

 $x_0 = 0$

 $x_1 = \frac{b_2}{a_{22}}$

 $x_2 = \frac{a_{22}}{-a_{12}b_2 + a_{22}b_1}$

$$x_3 = 0$$

$$\Psi = -\frac{b_2 c_2}{a_{22}}$$

```
Table #0.1.-1 pots: pot #0:
```

new: $a_{21}c_2 - a_{22}c_1 \ge 0$

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$ all:

symbol $b_2: (0, \infty)$

symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{21}:(0,\infty)$

symbol $a_{12}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

pot #1:

new:

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{21}:(0,\infty)$

symbol $a_{12}: (-\infty, 0]$

 $-c_1 + c_2 \geqslant 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

pot #2:

new:

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty,0)$

symbol $a_{21}: (-\infty, 0]$

symbol $a_{12}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$ pot #3:

new:

$$\begin{array}{l} a_{21}c_2 - a_{22}c_1 \geqslant 0 \\ \text{all:} \\ \text{symbol } b_2 : (0, \infty) \\ \text{symbol } a_{11} : (0, \infty) \\ \text{symbol } b_1 : (0, \infty) \\ \text{symbol } c_1 : (-\infty, 0) \\ \text{symbol } a_{21} : (-\infty, 0] \\ \text{symbol } a_{12} : (-\infty, 0] \\ \text{symbol } a_{12} : (-\infty, 0] \\ -c_1 + c_2 \geqslant 0 \\ -a_{11}c_2 + a_{12}c_1 > 0 \\ a_{11}a_{22} - a_{12}a_{21} > 0 \\ a_{21}c_2 - a_{22}c_1 \geqslant 0 \end{array}$$

		x_0	x_1	x_2	x_3
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Solution:

Solution:

$$x_0 = \frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_1 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_2 = 0$$

$$x_3 = 0$$

 $\Psi = \frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Table #0.-1

pots:

pot #0:

new:

 $a_{11}c_2 - a_{12}c_1 \geqslant 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{21}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 \geqslant 0$

pot #1:

new:

$$a_{11}c_2 - a_{12}c_1 \geqslant 0$$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{21}: (-\infty, 0]$

$$-c_1 + c_2 \geqslant 0$$

$$a_{11}c_2 - a_{12}c_1 \geqslant 0$$

		x_0	x_1	x_2	x_3
x_0	$\frac{b_1}{a_{11}}$	1	$\frac{a_{12}}{a_{11}}$	$\frac{1}{a_{11}}$	0
x_3	$b_2 - \frac{a_{21}b_1}{a_{11}}$	0	$a_{22} - \frac{a_{12}a_{21}}{a_{11}}$	$-\frac{a_{21}}{a_{11}}$	1
Ψ	$-\frac{b_{1}c_{1}}{a_{11}}$	0	$c_2 - \frac{a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

$$x_0 = \frac{b_1}{a_{11}} \\
 x_1 = 0$$

$$x_1 - 0$$

$$\begin{aligned}
x_2 &= 0 \\
x_1 &= b \end{aligned} \qquad a_{21}b$$

$$x_3 = b_2 - \frac{a_{21}b_1}{a_{11}}$$

$$\Psi = -\frac{b_1c_1}{a_{11}}$$

```
Table \#1
```

Moving out basis: x_3 from line: 1

Moving to basis: x_0

pots: pot #0: new: symbol $a_{11}:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $c_1:(-\infty,0)$ $-c_1 + c_2 \geqslant 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1:(-\infty,0)$ symbol $a_{11}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ pot #1: new: symbol $a_{11}:(-\infty,0]$ symbol $a_{21}:(0,\infty)$ symbol $c_1: (-\infty, 0)$ $-c_1 + c_2 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{11}:(-\infty,0]$

 $-c_1 + c_2 \geqslant 0$

		x_0	x_1	x_2	x_3
x_2	$-\frac{a_{11}b_2-a_{21}b_1}{a_{21}}$	0	$-\frac{a_{11}a_{22}-a_{12}a_{21}}{a_{21}}$	1	$-\frac{a_{11}}{a_{21}}$
x_0	$\frac{b_2}{a_{21}}$	1	$\frac{a_{22}}{a_{21}}$	0	$\frac{1}{a_{21}}$
Ψ	$-\frac{b_{2}c_{1}}{a_{21}}$	0	$c_2 - \frac{a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

```
Moving out basis: x_2 from line: 0
Moving to basis: x_1
pots:
pot #0:
new:
symbol a_{22}:(0,\infty)
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{11}:(0,\infty)
symbol a_{22}:(0,\infty)
-c_1 + c_2 \geqslant 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
pot #1:
new:
symbol a_{22}: (-\infty, 0]
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{11}:(0,\infty)
symbol a_{22}: (-\infty, 0]
-c_1 + c_2 \geqslant 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
pot #2:
new:
symbol a_{22}:(0,\infty)
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
```

symbol $c_1:(-\infty,0)$

Table #1.0

symbol $a_{11}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{21}c_2 + a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ $a_{12}b_2 - a_{22}b_1 \geqslant 0$ pot #3: new: symbol $a_{22}:(-\infty,0]$ $-a_{21}c_2 + a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{11}: (-\infty, 0]$ symbol $a_{22}:(-\infty,0]$ $-c_1 + c_2 \geqslant 0$ $-a_{21}c_2 + a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

```
Table #1.0.1
```

Moving out basis: x_0 from line: 1

Moving to basis: x_3

pots: pot #0:

new:

symbol $a_{12}:(0,\infty)$

 $-a_{11}c_2 + a_{12}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1:(-\infty,0)$

symbol $a_{11}:(0,\infty)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

pot #1:

new:

symbol $a_{12}:(0,\infty)$

 $-a_{11}c_2 + a_{12}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1:(-\infty,0)$

symbol $a_{11}:(0,\infty)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}: (-\infty, 0]$

 $-c_1 + c_2 \geqslant 0$

 $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $-a_{11}c_2 + a_{12}c_1 > 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{b_1}{a_{12}}$	$\frac{a_{11}}{a_{12}}$	1	$\frac{1}{a_{12}}$	0
x_3	$\frac{a_{12}b_2 - a_{22}b_1}{a_{12}}$	$\frac{-a_{11}a_{22} + a_{12}a_{21}}{a_{12}}$	0	$-\frac{a_{22}}{a_{12}}$	1
Ψ	$-\frac{b_{1}c_{2}}{a_{12}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{12}}$	0	$-\frac{c_2}{a_{12}}$	0

Solution:

 $x_0 = 0$

 $x_1 = \frac{b_1}{a_{12}}$

 $x_2 = 0^{11}$

$$x_3 = \frac{a_{12}b_2 - a_{22}b_1}{a_{12}}$$

$$\Psi = -\frac{b_1c_2}{a_{12}}$$

```
Table #1.0.-1

pots:
pot #0:
new:
a_{11}c_2 - a_{12}c_1 \ge 0
all:
```

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$

symbol $c_1: (0,\infty)$ symbol $c_1: (-\infty,0)$

symbol $a_{11}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 \geqslant 0$

pot #1:

new:

$$a_{11}c_2 - a_{12}c_1 \geqslant 0$$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{11}:(0,\infty)$

symbol $a_{22}:(-\infty,0]$

 $-c_1 + c_2 \geqslant 0$

 $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $a_{11}c_2 - a_{12}c_1 \geqslant 0$

pot #2:

new:

$$a_{11}c_2 - a_{12}c_1 \geqslant 0$$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $c_1: (-\infty, 0)$

symbol $a_{11}: (-\infty, 0]$

symbol $a_{22}:(0,\infty)$

 $-c_1 + c_2 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 \geqslant 0$

pot #3:

new:

$$\begin{array}{l} a_{11}c_2 - a_{12}c_1 \geqslant 0 \\ \text{all:} \\ \text{symbol } b_2 : (0, \infty) \\ \text{symbol } a_{21} : (0, \infty) \\ \text{symbol } b_1 : (0, \infty) \\ \text{symbol } c_1 : (-\infty, 0) \\ \text{symbol } a_{11} : (-\infty, 0] \\ \text{symbol } a_{22} : (-\infty, 0] \\ -c_1 + c_2 \geqslant 0 \\ -a_{21}c_2 + a_{22}c_1 > 0 \\ -a_{11}a_{22} + a_{12}a_{21} > 0 \\ a_{11}c_2 - a_{12}c_1 \geqslant 0 \end{array}$$

		x_0	x_1	x_2	x_3
x_1	$rac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_{2}c_{2}+a_{12}b_{2}c_{1}+a_{21}b_{1}c_{2}-a_{22}b_{1}c_{1}}{a_{11}a_{22}-a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Solution:

Solution:

$$x_0 = \frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_1 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_2 = 0$$

$$x_3 = 0$$

 $\Psi = \frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$

```
Moving out basis: x_0 from line: 1
Moving to basis: x_1
pots:
pot #0:
new:
symbol a_{22}:(0,\infty)
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{11}:(0,\infty)
symbol a_{22}:(0,\infty)
-c_1 + c_2 \geqslant 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
pot #1:
new:
symbol a_{22}:(0,\infty)
-a_{21}c_2 + a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_1:(-\infty,0)
symbol a_{11}:(0,\infty)
symbol a_{22}:(0,\infty)
-c_1 + c_2 \geqslant 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} \geqslant 0
pot #2:
new:
symbol a_{22}:(0,\infty)
-a_{21}c_2 + a_{22}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
```

symbol $c_1:(-\infty,0)$

Table #1.1

symbol $a_{11}: (-\infty, 0]$ symbol $a_{22}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{21}c_2 + a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ pot #3: new: symbol $a_{22}:(0,\infty)$ $-a_{21}c_2 + a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_1:(-\infty,0)$ symbol $a_{11}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $-c_1 + c_2 \geqslant 0$ $-a_{21}c_2 + a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} \geqslant 0$

		x_0	x_1	x_2	x_3
x_2	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{22}}$	$\frac{a_{11}a_{22} - a_{12}a_{21}}{a_{22}}$	0	1	$-\frac{a_{12}}{a_{22}}$
x_1	$\frac{b_2}{a_{22}}$	$\frac{a_{21}}{a_{22}}$	1	0	$\frac{1}{a_{22}}$
Ψ	$-\frac{b_2c_2}{a_{22}}$	$\frac{-a_{21}c_2 + a_{22}c_1}{a_{22}}$	0	0	$-\frac{c_2}{a_{22}}$

$$x_0 = 0$$

$$x_1 = \frac{b_2}{a_{22}}$$

$$x_2 = \frac{-a_{12}b_2 + a_{22}b_1}{a_{22}}$$

$$x_3 = 0$$

$$\Psi = -\frac{b_2c_2}{a_{22}}$$

Table #1.-1

pots: pot #0: new: $a_{21}c_2 - a_{22}c_1 \ge 0$ all: symbol $b_2: (0, \infty)$ symbol $a_{21}: (0, \infty)$ symbol $b_1: (0, \infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{11}: (0, \infty)$

symbol $a_{11}: (0, \infty)$ $-c_1 + c_2 \ge 0$

 $-c_1 + c_2 \ge 0$ - $a_{11}b_2 + a_{21}b_1 \ge 0$ $a_{21}c_2 - a_{22}c_1 \ge 0$

pot #1:

new:

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

all:

symbol $b_2: (0, \infty)$ symbol $a_{21}: (0, \infty)$ symbol $b_1: (0, \infty)$ symbol $c_1: (-\infty, 0)$ symbol $a_{11}: (-\infty, 0]$ $-c_1 + c_2 \ge 0$

 $a_{21}c_2 - a_{22}c_1 \geqslant 0$

		x_0	x_1	x_2	x_3
x_2	$-\frac{a_{11}b_2-a_{21}b_1}{a_{21}}$	0	$-\frac{a_{11}a_{22}-a_{12}a_{21}}{a_{21}}$	1	$-\frac{a_{11}}{a_{21}}$
x_0	$\frac{b_2}{a_{21}}$	1	$\frac{a_{22}}{a_{21}}$	0	$\frac{1}{a_{21}}$
Ψ	$-rac{b_{2}c_{1}}{a_{21}}$	0	$c_2 - \frac{a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

$$x_0 = \frac{b_2}{a_{21}} \\
 x_1 = 0$$

$$x_2 = -\frac{a_{11}b_2 - a_{21}b_1}{a_{21}}$$

$$x_3 = 0$$

$$\Psi = -\frac{b_2 c_1}{a_{21}}$$

```
Table #0
```

Moving out basis: x_2 from line: 0

Moving to basis: x_1

pots: pot #0: new: symbol $a_{22}:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $a_{12}b_2 - a_{22}b_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $a_{12}b_2 - a_{22}b_1 \geqslant 0$ pot #1: new: symbol $a_{22}:(-\infty,0]$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{22}: (-\infty, 0]$ symbol $b_1:(0,\infty)$ symbol $a_{12}:(0,\infty)$

symbol $c_2: (-\infty, 0)$

 $c_1 - c_2 > 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{b_1}{a_{12}}$	$\frac{a_{11}}{a_{12}}$	1	$\frac{1}{a_{12}}$	0
x_3	$b_2 - \frac{a_{22}b_1}{a_{12}}$	$-\frac{a_{11}a_{22}-a_{12}a_{21}}{a_{12}}$	0	$-\frac{a_{22}}{a_{12}}$	1
Ψ	$-rac{b_{1}c_{2}}{a_{12}}$	$-\frac{a_{11}c_2 - a_{12}c_1}{a_{12}}$	0	$-\frac{c_2}{a_{12}}$	0

```
Moving out basis: x_1 from line: 0
Moving to basis: x_0
pots:
pot #0:
new:
symbol a_{11}:(0,\infty)
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
pot #1:
new:
symbol a_{11}:(0,\infty)
a_{11}c_2 - a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
a_{11}c_2 - a_{12}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} \geqslant 0
pot #2:
new:
symbol a_{11}:(0,\infty)
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
```

symbol $c_2:(-\infty,0)$

Table #0.0

symbol $a_{12}:(0,\infty)$ symbol $a_{22}: (-\infty, 0]$ $c_1 - c_2 > 0$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ $a_{11}b_2 - a_{21}b_1 \geqslant 0$ pot #3: new: symbol $a_{11}:(0,\infty)$ $a_{11}c_2 - a_{12}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_2:(-\infty,0)$ symbol $a_{12}:(0,\infty)$ symbol $a_{22}: (-\infty, 0]$ $c_1 - c_2 > 0$ $a_{11}c_2 - a_{12}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} \geqslant 0$

		x_0	x_1	x_2	x_3
x_0	$\frac{b_1}{a_{11}}$	1	$\frac{a_{12}}{a_{11}}$	$\frac{1}{a_{11}}$	0
x_3	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}}$	0	$\frac{a_{11}a_{22} - a_{12}a_{21}}{a_{11}}$	$-\frac{a_{21}}{a_{11}}$	1
Ψ	$-\frac{b_{1}c_{1}}{a_{11}}$	0	$\frac{a_{11}c_2 - a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

$$x_0 = \frac{b_1}{a_{11}}$$

$$x_1 = 0$$

$$x_2 = 0$$

$$x_3 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}}$$

$$\Psi = -\frac{b_1c_1}{a_{11}}$$

```
Table \#0.1
Moving out basis: x_3 from line: 1
Moving to basis: x_0
pots:
pot #0:
new:
symbol a_{11}:(0,\infty)
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
pot #1:
new:
symbol a_{11}: (-\infty, 0]
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
all:
symbol b_2:(0,\infty)
symbol a_{11}: (-\infty, 0]
symbol b_1:(0,\infty)
```

symbol $c_2: (-\infty, 0)$ symbol $a_{12}: (0, \infty)$ symbol $a_{22}: (0, \infty)$

 $c_1 - c_2 > 0$

pot #2: new:

all:

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$

symbol $a_{11}: (0, \infty)$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

symbol $b_2: (0, \infty)$ symbol $a_{11}: (0, \infty)$ symbol $b_1: (0, \infty)$ symbol $c_2: (-\infty, 0)$ symbol $a_{12}:(0,\infty)$ symbol $a_{22}:(-\infty,0]$ $c_1 - c_2 > 0$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ pot #3: new: symbol $a_{11}:(-\infty,0]$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{11}: (-\infty, 0]$ symbol $b_1:(0,\infty)$ symbol $c_2: (-\infty, 0)$ symbol $a_{12}:(0,\infty)$ symbol $a_{22}: (-\infty, 0]$ $c_1 - c_2 > 0$ $a_{11}c_2 - a_{12}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} > 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

```
Table \#0.1.0
```

Moving out basis: x_1 from line: 0

Moving to basis: x_2

pots: pot #0:

new:

symbol $a_{21}:(0,\infty)$

 $a_{21}c_2 - a_{22}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $c_2: (-\infty, 0)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $c_1 - c_2 > 0$

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

 $a_{21}c_2 - a_{22}c_1 > 0$

pot #1:

new:

symbol $a_{21}:(0,\infty)$

 $a_{21}c_2 - a_{22}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{11}: (-\infty, 0]$

symbol $b_1:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $c_2: (-\infty, 0)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $c_1 - c_2 > 0$

 $a_{12}b_2 - a_{22}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 > 0$

 $-a_{11}a_{22} + a_{12}a_{21} > 0$

 $a_{21}c_2 - a_{22}c_1 > 0$

		x_0	x_1	x_2	x_3
x_2	$\frac{-a_{11}b_2 + a_{21}b_1}{a_{21}}$	0	$\frac{-a_{11}a_{22} + a_{12}a_{21}}{a_{21}}$	1	$-\frac{a_{11}}{a_{21}}$
x_0	$\frac{b_2}{a_{21}}$	1	$\frac{a_{22}}{a_{21}}$	0	$\frac{1}{a_{21}}$
Ψ	$-rac{b_{2}c_{1}}{a_{21}}$	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

$$x_0 = \frac{b_2}{a_{21}} \\
 x_1 = 0$$

$$x_1 = 0$$

$$x_2 = \frac{-a_{11}b_2 + a_{21}b_1}{a_{21}}$$

$$x_3 = 0$$

$$\Psi = -\frac{b_2 c_1}{a_{21}}$$

```
Table #0.1.-1
```

```
pots:
pot #0:
new:
-a_{21}c_2 + a_{22}c_1 \geqslant 0
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 \geqslant 0
pot #1:
new:
-a_{21}c_2 + a_{22}c_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(-\infty,0]
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{12}b_2 - a_{22}b_1 \geqslant 0
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{21}c_2 + a_{22}c_1 \geqslant 0
pot #2:
new:
-a_{21}c_2 + a_{22}c_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{11}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2: (-\infty, 0)
symbol a_{12}:(0,\infty)
symbol a_{22}: (-\infty, 0]
c_1 - c_2 > 0
a_{11}c_2 - a_{12}c_1 > 0
-a_{11}a_{22} + a_{12}a_{21} > 0
-a_{11}b_2 + a_{21}b_1 \geqslant 0
-a_{21}c_2 + a_{22}c_1 \geqslant 0
pot #3:
new:
```

$$\begin{array}{l} -a_{21}c_2 + a_{22}c_1 \geqslant 0 \\ \text{all:} \\ \text{symbol } b_2 : (0, \infty) \\ \text{symbol } a_{11} : (-\infty, 0] \\ \text{symbol } b_1 : (0, \infty) \\ \text{symbol } c_2 : (-\infty, 0) \\ \text{symbol } a_{12} : (0, \infty) \\ \text{symbol } a_{12} : (-\infty, 0] \\ c_1 - c_2 > 0 \\ a_{11}c_2 - a_{12}c_1 > 0 \\ -a_{11}a_{22} + a_{12}a_{21} > 0 \\ -a_{21}c_2 + a_{22}c_1 \geqslant 0 \end{array}$$

		x_0	x_1	x_2	x_3
x_1	$rac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_{2}c_{2}+a_{12}b_{2}c_{1}+a_{21}b_{1}c_{2}-a_{22}b_{1}c_{1}}{a_{11}a_{22}-a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Solution:

Solution:

$$x_0 = \frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_1 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_2 = 0$$

$$x_3 = 0$$

 $\Psi = \frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Table #0.-1

pots: pot #0: new: $-a_{11}c_2 + a_{12}c_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $a_{12}b_2 - a_{22}b_1 \geqslant 0$ $-a_{11}c_2 + a_{12}c_1 \geqslant 0$ pot #1: new: $-a_{11}c_2 + a_{12}c_1 \geqslant 0$ all:

symbol $b_2:(0,\infty)$
symbol $a_{22}:(-\infty,0]$
symbol $b_1:(0,\infty)$
symbol $a_{12}:(0,\infty)$
symbol $c_2: (-\infty, 0)$
$c_1 - c_2 > 0$

$$c_1 - c_2 > 0$$
$$-a_{11}c_2 + a_{12}c_1 \geqslant 0$$

		x_0	x_1	x_2	x_3
x_1	$\frac{b_1}{a_{12}}$	$rac{a_{11}}{a_{12}}$	1	$\frac{1}{a_{12}}$	0
x_3	$b_2 - \frac{a_{22}b_1}{a_{12}}$	$-\frac{a_{11}a_{22}-a_{12}a_{21}}{a_{12}}$	0	$-\frac{a_{22}}{a_{12}}$	1
Ψ	$-\frac{b_1c_2}{a_{12}}$	$-\frac{a_{11}c_2-a_{12}c_1}{a_{12}}$	0	$-\frac{c_2}{a_{12}}$	0

$$x_0 = 0$$

$$x_1 = \frac{b_1}{a_{12}}$$

$$x_2 = 0$$

$$x_3 = b_2 - \frac{a_{22}b_1}{a_{12}}$$

$$\Psi = -\frac{b_1c_2}{a_{12}}$$

```
Table #1
```

Moving out basis: x_3 from line: 1

Moving to basis: x_1

pots: pot #0: new: symbol $a_{22}:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ pot #1: new: symbol $a_{22}:(0,\infty)$ symbol $a_{12}:(-\infty,0]$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ all: symbol $b_2:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $a_{12}:(-\infty,0]$ symbol $c_2: (-\infty, 0)$

 $c_1 - c_2 > 0$

		x_0	x_1	x_2	x_3
x_2	$-\frac{a_{12}b_2-a_{22}b_1}{a_{22}}$	$a_{11} - \frac{a_{12}a_{21}}{a_{22}}$	0	1	$-\frac{a_{12}}{a_{22}}$
x_1	$\frac{b_2}{a_{22}}$	$\frac{a_{21}}{a_{22}}$	1	0	$\frac{1}{a_{22}}$
Ψ	$-\frac{b_{2}c_{2}}{a_{22}}$	$-\frac{a_{21}c_2-a_{22}c_1}{a_{22}}$	0	0	$-\frac{c_2}{a_{22}}$

```
Table #1.0
Moving out basis: x_2 from line: 0
Moving to basis: x_0
pots:
pot #0:
new:
symbol a_{21}:(0,\infty)
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
pot #1:
new:
symbol a_{21}: (-\infty, 0]
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(-\infty,0]
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
pot #2:
new:
symbol a_{21}:(0,\infty)
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
```

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

symbol $b_2: (0, \infty)$ symbol $a_{21}: (0, \infty)$ symbol $b_1: (0, \infty)$ symbol $c_2: (-\infty, 0)$

all:

symbol $a_{12}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $c_1 - c_2 > 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $a_{11}b_2 - a_{21}b_1 \geqslant 0$ pot #3: new: symbol $a_{21}:(-\infty,0]$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(-\infty,0]$ symbol $b_1:(0,\infty)$ symbol $c_2: (-\infty, 0)$ symbol $a_{12}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $c_1 - c_2 > 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$

		x_0	x_1	x_2	x_3
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

```
Table #1.0.1
```

Moving out basis: x_1 from line: 1

Moving to basis: x_3

pots: pot #0:

new:

symbol $a_{11}:(0,\infty)$

 $a_{11}c_2 - a_{12}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}:(0,\infty)$

symbol $b_1:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $c_2: (-\infty, 0)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $c_1 - c_2 > 0$

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $a_{21}c_2 - a_{22}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $a_{11}b_2 - a_{21}b_1 \geqslant 0$

 $a_{11}c_2 - a_{12}c_1 > 0$

pot #1:

new:

symbol $a_{11}:(0,\infty)$

 $a_{11}c_2 - a_{12}c_1 > 0$

all:

symbol $b_2:(0,\infty)$

symbol $a_{21}: (-\infty, 0]$

symbol $b_1:(0,\infty)$

symbol $a_{11}:(0,\infty)$

symbol $c_2: (-\infty, 0)$

symbol $a_{12}:(0,\infty)$

symbol $a_{22}:(0,\infty)$

 $c_1 - c_2 > 0$

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $a_{21}c_2 - a_{22}c_1 > 0$

 $a_{11}a_{22} - a_{12}a_{21} > 0$

 $a_{11}c_2 - a_{12}c_1 > 0$

		x_0	x_1	x_2	x_3
x_0	$\frac{b_1}{a_{11}}$	1	$\frac{a_{12}}{a_{11}}$	$\frac{1}{a_{11}}$	0
x_3	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}}$	0	$\frac{a_{11}a_{22} - a_{12}a_{21}}{a_{11}}$	$-\frac{a_{21}}{a_{11}}$	1
Ψ	$-rac{b_{1}c_{1}}{a_{11}}$	0	$\frac{a_{11}c_2 - a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

$$\begin{array}{c} x_0 = \frac{b_1}{a_{11}} \\ x_1 = 0 \end{array}$$

$$x_1 = 0$$

$$x_2 = 0$$

$$x_3 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}}$$

$$\Psi = -\frac{b_1c_1}{a_{11}}$$

```
Table #1.0.-1
```

```
pots:
pot #0:
new:
-a_{11}c_2 + a_{12}c_1 \geqslant 0
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 \geqslant 0
pot #1:
new:
-a_{11}c_2 + a_{12}c_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(-\infty,0]
symbol b_1:(0,\infty)
symbol c_2:(-\infty,0)
symbol a_{12}:(0,\infty)
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
-a_{12}b_2 + a_{22}b_1 \geqslant 0
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
-a_{11}c_2 + a_{12}c_1 \geqslant 0
pot #2:
new:
-a_{11}c_2 + a_{12}c_1 \geqslant 0
all:
symbol b_2:(0,\infty)
symbol a_{21}:(0,\infty)
symbol b_1:(0,\infty)
symbol c_2: (-\infty, 0)
symbol a_{12}: (-\infty, 0]
symbol a_{22}:(0,\infty)
c_1 - c_2 > 0
a_{21}c_2 - a_{22}c_1 > 0
a_{11}a_{22} - a_{12}a_{21} > 0
a_{11}b_2 - a_{21}b_1 \geqslant 0
-a_{11}c_2 + a_{12}c_1 \geqslant 0
pot #3:
new:
```

$$\begin{array}{l} -a_{11}c_2 + a_{12}c_1 \geqslant 0 \\ \text{all:} \\ \text{symbol } b_2 : (0, \infty) \\ \text{symbol } a_{21} : (-\infty, 0] \\ \text{symbol } b_1 : (0, \infty) \\ \text{symbol } c_2 : (-\infty, 0) \\ \text{symbol } a_{12} : (-\infty, 0] \\ \text{symbol } a_{12} : (0, \infty) \\ c_1 - c_2 > 0 \\ a_{21}c_2 - a_{22}c_1 > 0 \\ a_{21}c_2 - a_{22}c_1 > 0 \\ a_{21}c_2 - a_{12}a_{21} > 0 \\ -a_{11}c_2 + a_{12}c_1 \geqslant 0 \end{array}$$

		x_0	x_1	x_2	x_3
x_0	$\frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	1	0	$\frac{a_{22}}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{a_{12}}{-a_{11}a_{22} + a_{12}a_{21}}$
x_1	$\frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	1	$\frac{a_{21}}{-a_{11}a_{22} + a_{12}a_{21}}$	$\frac{a_{11}}{a_{11}a_{22} - a_{12}a_{21}}$
Ψ	$\frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$	0	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Solution:

Solution:

$$x_0 = \frac{-a_{12}b_2 + a_{22}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_1 = \frac{a_{11}b_2 - a_{21}b_1}{a_{11}a_{22} - a_{12}a_{21}}$$

$$x_2 = 0$$

$$x_3 = 0$$

 $\Psi = \frac{-a_{11}b_2c_2 + a_{12}b_2c_1 + a_{21}b_1c_2 - a_{22}b_1c_1}{a_{11}a_{22} - a_{12}a_{21}}$

Table #1.1Moving out basis: x_1 from line: 1 Moving to basis: x_0 pots: pot #0: new: symbol $a_{21}:(0,\infty)$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_2:(-\infty,0)$ symbol $a_{12}:(0,\infty)$ symbol $a_{22}:(0,\infty)$ $c_1 - c_2 > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ pot #1: new: symbol $a_{21}:(0,\infty)$ $a_{21}c_2 - a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_2:(-\infty,0)$ symbol $a_{12}:(0,\infty)$ symbol $a_{22}:(0,\infty)$

 $c_1 - c_2 > 0$

pot #2: new:

all:

 $-a_{12}b_2 + a_{22}b_1 \geqslant 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$

symbol $a_{21}: (0, \infty)$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$

symbol $b_2: (0, \infty)$ symbol $a_{21}: (0, \infty)$ symbol $b_1: (0, \infty)$ symbol $c_2: (-\infty, 0)$ symbol $a_{12}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $c_1 - c_2 > 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $a_{11}a_{22} - a_{12}a_{21} > 0$ $-a_{11}b_2 + a_{21}b_1 \geqslant 0$ pot #3: new: symbol $a_{21}:(0,\infty)$ $a_{21}c_2 - a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{21}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_2:(-\infty,0)$ symbol $a_{12}:(-\infty,0]$ symbol $a_{22}:(0,\infty)$ $c_1 - c_2 > 0$ $a_{21}c_2 - a_{22}c_1 > 0$ $-a_{11}a_{22} + a_{12}a_{21} \geqslant 0$

		x_0	x_1	x_2	x_3
x_2	$\frac{-a_{11}b_2 + a_{21}b_1}{a_{21}}$	0	$\frac{-a_{11}a_{22} + a_{12}a_{21}}{a_{21}}$	1	$-\frac{a_{11}}{a_{21}}$
x_0	$\frac{b_2}{a_{21}}$	1	$\frac{a_{22}}{a_{21}}$	0	$\frac{1}{a_{21}}$
Ψ	$-\frac{b_{2}c_{1}}{a_{21}}$	0	$\frac{a_{21}c_2 - a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

$$x_0 = \frac{b_2}{a_{21}}$$

$$x_1 = 0$$

$$x_2 = \frac{-a_{11}b_2 + a_{21}b_1}{a_{21}}$$

$$x_3 = 0$$

$$\Psi = -\frac{b_2c_1}{a_{21}}$$

Table #1.-1

pots: pot #0: new: $-a_{21}c_2 + a_{22}c_1 \geqslant 0$ all: symbol $b_2:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{12}:(0,\infty)$ symbol $c_2: (-\infty, 0)$ $c_1 - c_2 > 0$ $-a_{12}b_2 + a_{22}b_1 \geqslant 0$

 $-a_{21}c_2 + a_{22}c_1 \geqslant 0$ pot #1:

new:

$$-a_{21}c_2 + a_{22}c_1 \geqslant 0$$

all:

symbol $b_2:(0,\infty)$ symbol $a_{22}:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $a_{12}: (-\infty, 0]$ symbol $c_2: (-\infty, 0)$

$$c_1 - c_2 > 0$$

$$-a_{21}c_2 + a_{22}c_1 \geqslant 0$$

		x_0	x_1	x_2	x_3
x_2	$-\frac{a_{12}b_2-a_{22}b_1}{a_{22}}$	$a_{11} - \frac{a_{12}a_{21}}{a_{22}}$	0	1	$-\frac{a_{12}}{a_{22}}$
x_1	$\frac{b_2}{a_{22}}$	$\frac{a_{21}}{a_{22}}$	1	0	$\frac{1}{a_{22}}$
Ψ	$-\frac{b_{2}c_{2}}{a_{22}}$	$-\frac{a_{21}c_2-a_{22}c_1}{a_{22}}$	0	0	$-\frac{c_2}{a_{22}}$

$$x_0 = 0$$

$$x_1 = \frac{b_2}{a_{22}}$$

$$x_2 = -\frac{a_{12}b_2 - a_{22}b_1}{a_{22}}$$

$$x_3 = 0$$

$$\Psi = -\frac{b_2c_2}{a_{22}}$$

Table #-1

pots: pot #0:

new:

symbol $c_2: [0, \infty)$ symbol $c_1:[0,\infty)$

all:

symbol $b_2:(0,\infty)$ symbol $b_1:(0,\infty)$ symbol $c_2:[0,\infty)$ symbol $c_1:[0,\infty)$

		x_0	x_1	x_2	x_3
x_2	b_1	a_{11}	a_{12}	1	0
x_3	b_2	a_{21}	a_{22}	0	1
Ψ	0	c_1	c_2	0	0

Solution:

 $x_0 = 0$

 $x_1 = 0$

 $x_2 = b_1$

 $x_3 = b_2$ $\Psi = 0$