

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 $c_1 : (-\infty, 0)$

$-c_1 + c_2 \geq 0$

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$-c_1 + c_2 \geq 0$

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

pot #1:

new:

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

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

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

$-c_1 + c_2 \geq 0$

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$-c_1 + c_2 \geq 0$

		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	$-\frac{b_1c_1}{a_{11}}$	0	$c_2 - \frac{a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

Table #0.0

Moving out basis: x_0 from line: 0

Moving to basis: x_1

pots:

pot #0:

new:

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

pot #1:

new:

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

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

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

$-a_{11}a_{22} + a_{12}a_{21} \geq 0$

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

$-c_1 + c_2 \geq 0$

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

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

$-a_{11}a_{22} + a_{12}a_{21} \geq 0$

pot #2:

new:

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

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

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

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

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

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

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

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

		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

Solution:

$$\begin{aligned}
 x_0 &= 0 \\
 x_1 &= \frac{b_1}{a_{12}} \\
 x_2 &= 0 \\
 x_3 &= \frac{a_{12}b_2 - a_{22}b_1}{a_{12}} \\
 \Psi &= -\frac{b_1c_2}{a_{12}}
 \end{aligned}$$

Table #0.1

Moving out basis: x_3 from line: 1

Moving to basis: x_1

pots:

pot #0:

new:

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

pot #1:

new:

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

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

$-c_1 + c_2 \geq 0$

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

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

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

pot #2:

new:

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

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

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

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

pot #1:

new:

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

		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	$-\frac{b_2c_2}{a_{22}}$	$\frac{-a_{21}c_2 + a_{22}c_1}{a_{22}}$	0	0	$-\frac{c_2}{a_{22}}$

Solution:

$x_0 = 0$

$$\begin{aligned}
x_1 &= \frac{b_2}{a_{22}} \\
x_2 &= \frac{-a_{12}b_2+a_{22}b_1}{a_{22}} \\
x_3 &= 0 \\
\Psi &= -\frac{b_2c_2}{a_{22}}
\end{aligned}$$

Table #0.1.-1

pots:

pot #0:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

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

pot #1:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

pot #2:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

pot #3:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

		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	$\frac{a_{21}c_2-a_{22}c_1}{a_{11}a_{22}-a_{12}a_{21}}$	$\frac{-a_{11}c_2+a_{12}c_1}{a_{11}a_{22}-a_{12}a_{21}}$

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:

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

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$$-c_1 + c_2 \geq 0$$

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

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

pot #1:

new:

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

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$$-c_1 + c_2 \geq 0$$

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

		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	$-\frac{b_1c_1}{a_{11}}$	0	$c_2 - \frac{a_{12}c_1}{a_{11}}$	$-\frac{c_1}{a_{11}}$	0

Solution:

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

$$x_1 = 0$$

$$x_2 = 0$$

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

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

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 $c_1 : (-\infty, 0)$

$-c_1 + c_2 \geq 0$

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$-c_1 + c_2 \geq 0$

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

pot #1:

new:

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

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

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

$-c_1 + c_2 \geq 0$

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$-c_1 + c_2 \geq 0$

		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	$-\frac{b_2c_1}{a_{21}}$	0	$c_2 - \frac{a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

Table #1.0

Moving out basis: x_2 from line: 0

Moving to basis: x_1

pots:

pot #0:

new:

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

pot #1:

new:

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

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

$-c_1 + c_2 \geq 0$

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

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

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

pot #2:

new:

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

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

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

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

pot #1:

new:

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

		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	$-\frac{b_1c_2}{a_{12}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{12}}$	0	$-\frac{c_2}{a_{12}}$	0

Solution:

$x_0 = 0$

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

$$x_2 = 0$$

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

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

Table #1.0.-1

pots:

pot #0:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

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

pot #1:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

pot #2:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

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

pot #3:

new:

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

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

$$-c_1 + c_2 \geq 0$$

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

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

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

		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	$\frac{a_{21}c_2 - a_{22}c_1}{a_{11}a_{22} - a_{12}a_{21}}$	$\frac{-a_{11}c_2 + a_{12}c_1}{a_{11}a_{22} - a_{12}a_{21}}$

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 #1.1

Moving out basis: x_0 from line: 1

Moving to basis: x_1

pots:

pot #0:

new:

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

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

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

pot #1:

new:

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

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

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

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

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

$-c_1 + c_2 \geq 0$

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

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

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

pot #2:

new:

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

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

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

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

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

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

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

		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	$-\frac{c_2}{a_{22}}$

Solution:

$$\begin{aligned}
 x_0 &= 0 \\
 x_1 &= \frac{b_2}{a_{22}} \\
 x_2 &= \frac{-a_{12}b_2+a_{22}b_1}{a_{22}} \\
 x_3 &= 0 \\
 \Psi &= -\frac{b_2c_2}{a_{22}}
 \end{aligned}$$

Table #1.-1

pots:

pot #0:

new:

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

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$$-c_1 + c_2 \geq 0$$

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

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

pot #1:

new:

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

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

all:

symbol $b_2 : (0, \infty)$

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

symbol $b_1 : (0, \infty)$

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

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

$$-c_1 + c_2 \geq 0$$

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

		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	$-\frac{b_2c_1}{a_{21}}$	0	$c_2 - \frac{a_{22}c_1}{a_{21}}$	0	$-\frac{c_1}{a_{21}}$

Solution:

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

$$x_1 = 0$$

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

$$x_3 = 0$$

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

Table #-1

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:
 $x_0 = 0$
 $x_1 = 0$
 $x_2 = b_1$
 $x_3 = b_2$
 $\Psi = 0$