

Table # initial

pots:
pot #0:
new:
symbol $b_0 : (0, \infty)$
all:
symbol $b_0 : (0, \infty)$

		x_0	x_1	x_2	x_3
x_2	b_0	1	a_{01}	1	0
x_3	1	2	1	0	1
Ψ	0	-2	-1	0	0

Table #0
Moving out basis: x_2 from line: 0
Moving to basis: x_0

pots:
pot #0:
new:
symbol b_0 : $(0, 1/2]$
all:
symbol b_0 : $(0, 1/2]$

		x_0	x_1	x_2	x_3
x_0	b_0	1	a_{01}	1	0
x_3	$-2b_0 + 1$	0	$-2a_{01} + 1$	-2	1
Ψ	$2b_0$	0	$2a_{01} - 1$	2	0

Table #0.0
Moving out basis: x_0 from line: 0
Moving to basis: x_1

pots:
pot #0:
new:
symbol $a_{01} : (0, 1/2)$
 $a_{01} - b_0 \geqslant 0$
all:
symbol $a_{01} : (0, 1/2)$
symbol $b_0 : (0, 1/2]$
 $a_{01} - b_0 \geqslant 0$

		x_0	x_1	x_2	x_3
x_1	$\frac{b_0}{a_{01}}$	$\frac{1}{a_{01}}$	1	$\frac{1}{a_{01}}$	0
x_3	$\frac{1}{a_{01}}(a_{01} - b_0)$	$2 - \frac{1}{a_{01}}$	0	$-\frac{1}{a_{01}}$	1
Ψ	$\frac{b_0}{a_{01}}$	$-2 + \frac{1}{a_{01}}$	0	$\frac{1}{a_{01}}$	0

Solution:
 $x_0 = 0$
 $x_1 = \frac{b_0}{a_{01}}$
 $x_2 = 0$
 $x_3 = \frac{1}{a_{01}}(a_{01} - b_0)$
 $\Psi = \frac{b_0}{a_{01}}$

Table #0.1

Moving out basis: x_3 from line: 1

Moving to basis: x_1

pots:

pot #0:

new:

symbol $a_{01} : (0, 1/2)$

$-a_{01} + b_0 \geq 0$

all:

symbol $a_{01} : (0, 1/2)$

symbol $b_0 : (0, 1/2]$

$-a_{01} + b_0 \geq 0$

pot #1:

new:

symbol $a_{01} : (-\infty, 0]$

all:

symbol $a_{01} : (-\infty, 0]$

symbol $b_0 : (0, 1/2]$

		x_0	x_1	x_2	x_3
x_0	$\frac{a_{01}-b_0}{2a_{01}-1}$	1	0	$-\frac{1}{2a_{01}-1}$	$\frac{a_{01}}{2a_{01}-1}$
x_1	$\frac{2b_0-1}{2a_{01}-1}$	0	1	$\frac{2}{2a_{01}-1}$	$-\frac{1}{2a_{01}-1}$
Ψ	1	0	0	0	1

Solution:

$$x_0 = \frac{a_{01}-b_0}{2a_{01}-1}$$

$$x_1 = \frac{2b_0-1}{2a_{01}-1}$$

$$x_2 = 0$$

$$x_3 = 0$$

$$\Psi = 1$$

Table #0.-1

pots:

pot #0:

new:

symbol $a_{01} : [1/2, \infty)$

all:

symbol $a_{01} : [1/2, \infty)$

symbol $b_0 : (0, 1/2]$

		x_0	x_1	x_2	x_3
x_0	b_0	1	a_{01}	1	0
x_3	$-2b_0 + 1$	0	$-2a_{01} + 1$	-2	1
Ψ	$2b_0$	0	$2a_{01} - 1$	2	0

Solution:

$$x_0 = b_0$$

$$x_1 = 0$$

$$x_2 = 0$$

$$x_3 = -2b_0 + 1$$

$$\Psi = 2b_0$$

Table #1
Moving out basis: x_3 from line: 1
Moving to basis: x_0

pots:
pot #0:
new:
symbol $b_0 : [1/2, \infty)$
all:
symbol $b_0 : [1/2, \infty)$

		x_0	x_1	x_2	x_3
x_2	$b_0 - \frac{1}{2}$	0	$a_{01} - \frac{1}{2}$	1	$-\frac{1}{2}$
x_0	$\frac{1}{2}$	1	$\frac{1}{2}$	0	$\frac{1}{2}$
Ψ	1	0	0	0	1

Solution:
 $x_0 = \frac{1}{2}$
 $x_1 = 0$
 $x_2 = b_0 - \frac{1}{2}$
 $x_3 = 0$
 $\Psi = 1$