

$\{1\} \{2\} \{x\} \{y\} \{z\} \{1+1\} \{1+2\} \{1+x\} \{1+y\} \{1+z\} \{2+1\} \{2+2\} \{2+x\} \{2+y\} \{2+z\} \{x+1\}$
 $\{x+2\} \{x+x\} \{x+y\} \{x+z\} \{y+1\} \{y+2\} \{y+x\} \{y+y\} \{y+z\} \{z+1\} \{z+2\} \{z+x\} \{z+y\} \{z+z\}$

$2 = 1 + 2$

$\{1\} \{2\} \{x\} \{y\} \{z, 1+2\} \{1+1\} \{1+x\} \{1+y\} \{1+z\} \{2+1\} \{2+2\} \{2+x\} \{2+y\} \{2+z\} \{x+1\}$
 $\{x+2\} \{x+x\} \{x+y\} \{x+z\} \{y+1\} \{y+2\} \{y+x\} \{y+y\} \{y+z\} \{z+1\} \{z+2\} \{z+x\} \{z+y\}$
 $\{z+z\}$

input (x)

$\{1\} \{2\} \{x\} \{y\} \{z, 1+2\} \{1+1\} \{1+x\} \{1+y\} \{1+z\} \{2+1\} \{2+2\} \{2+x\}$
 $\{2+y\} \{2+z\} \{x+1\} \{x+2\} \{x+x\} \{x+y\} \{x+z\} \{y+1\} \{y+2\} \{y+x\}$
 $\{y+y\} \{y+z\} \{z+1\} \{z+2\} \{z+x\} \{z+y\} \{z+z\}$

$y = x + 1$

$y = z + 2$

$\{1\} \{2\} \{x\} \{y, x+1\}$
 $\{z, 1+2\} \{1+1\} \{1+x\} \{1+y\}$
 $\{2+1\} \{2+2\} \{2+x\}$
 $\{2+y\} \{2+z\} \{x+1\} \{x+2\} \{x+x\}$
 $\{x+y\} \{x+z\} \{y+1\} \{y+2\}$
 $\{y+x\} \{y+y\} \{y+z\} \{z+1\}$
 $\{z+2\} \{z+x\} \{z+y\} \{z+z\}$

$\{1\} \{2\} \{x\} \{y, z+2\} \{z, 1+2\} \{1+1\} \{1+x\} \{1+y\} \{1+z\} \{2+1\}$
 $\{2+2\} \{2+x\} \{2+y\} \{2+z\} \{x+1\} \{x+2\} \{x+x\} \{x+y\} \{x+z\} \{y+1\}$
 $\{y+2\} \{y+x\} \{y+y\} \{y+z\} \{z+1\} \{z+2\} \{z+x\} \{z+y\} \{z+z\}$

$\{1\} \{2\} \{x\} \{y\} \{z, 1+2\} \{1+1\} \{1+x\} \{1+y\} \{1+z\} \{2+1\} \{2+2\} \{2+x\} \{2+y\}$
 $\{2+z\} \{x+1\} \{x+2\} \{x+x\} \{x+y\} \{x+z\} \{y+1\} \{y+2\} \{y+x\} \{y+y\}$
 $\{y+z\} \{z+1\} \{z+2\} \{z+x\} \{z+y\} \{z+z\}$