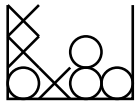
UCT-k harca - csőamőba

B. Szörényi

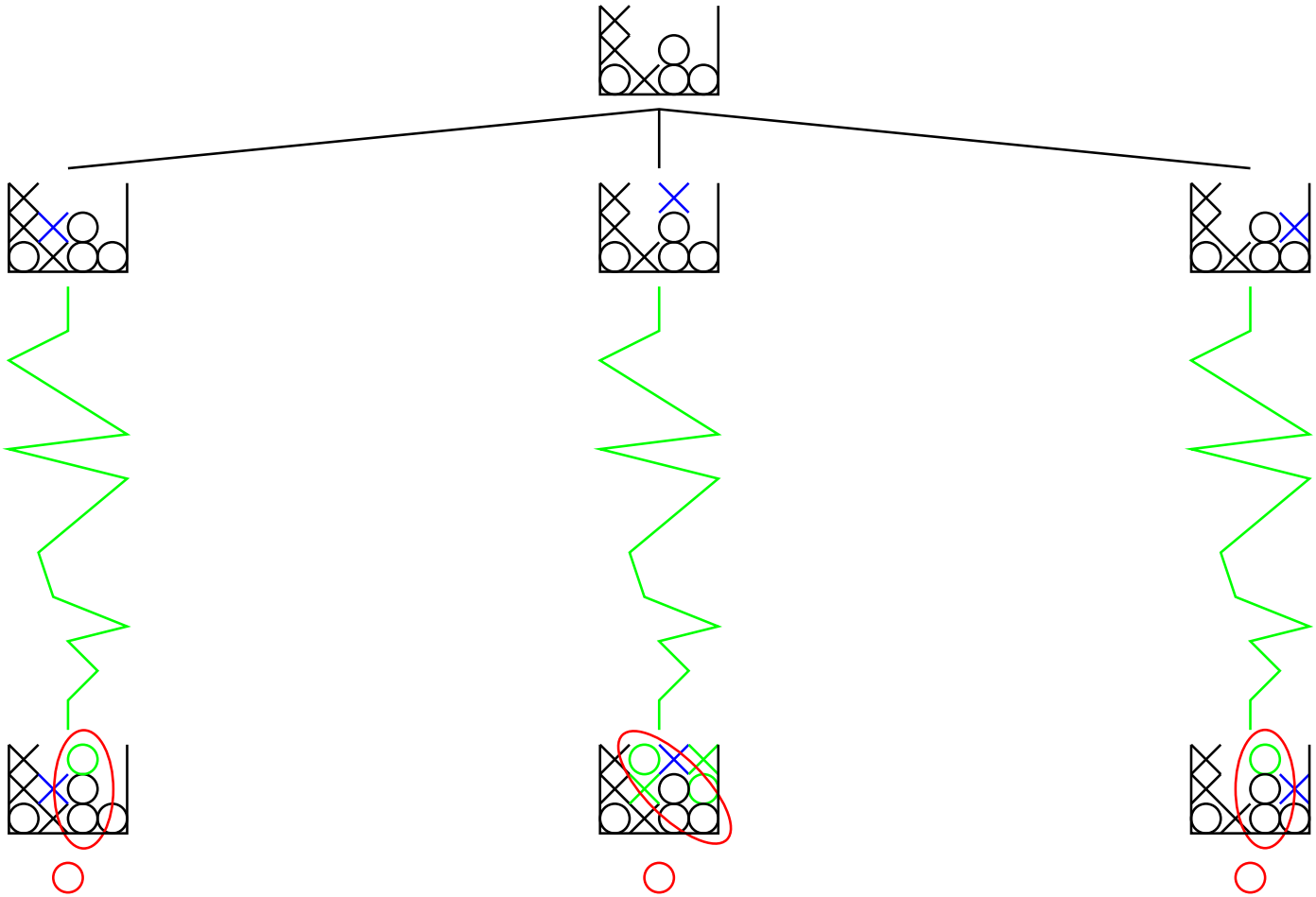
A feladat:
Adott szituációban döntsük el, hogy melyik lépést válasszuk.

Hogyan?
Hívjuk segítségül az UCT (kiértékelő) algoritmust,
és futtassuk (mondjuk) 6 szimulációig!

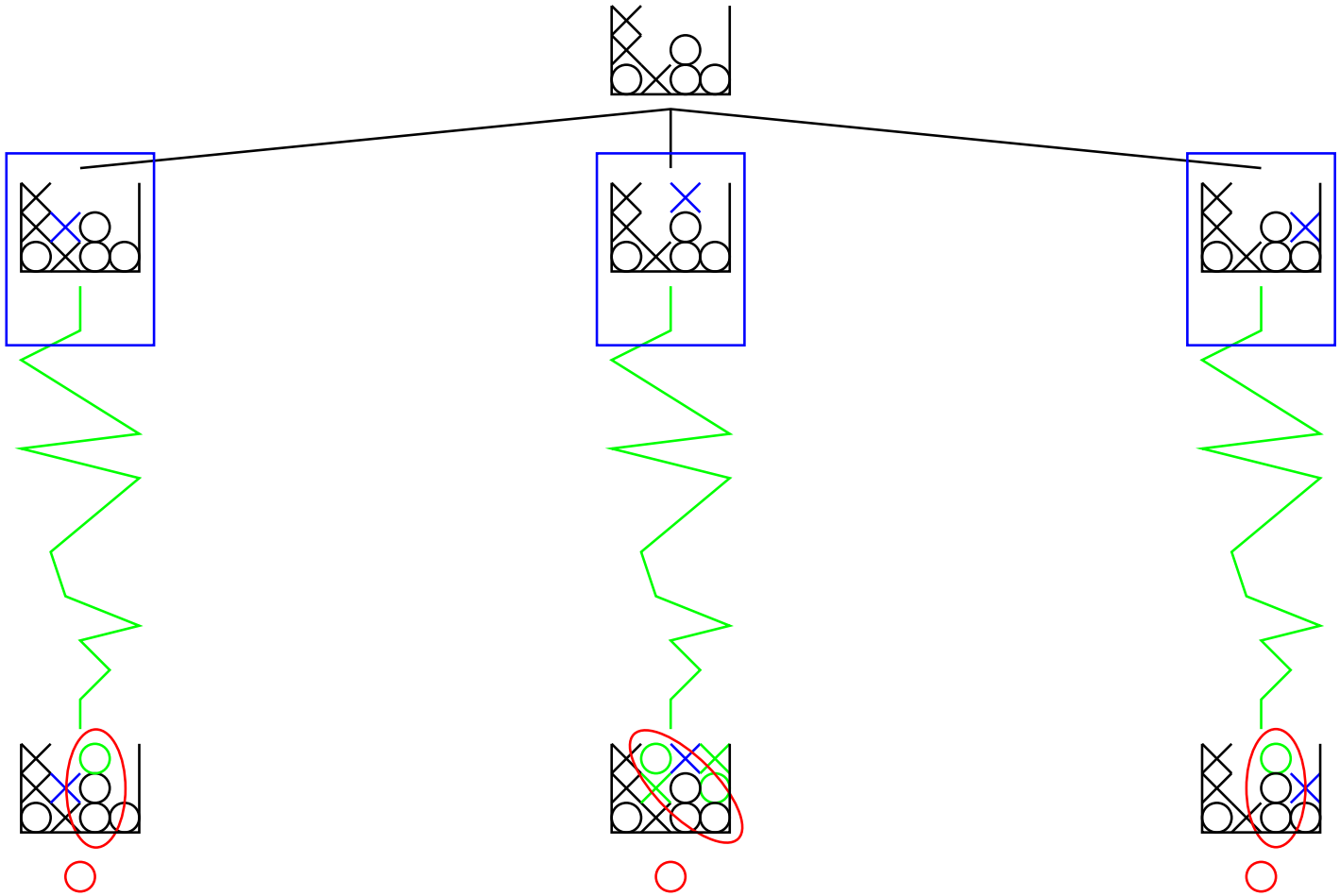
Az aktuális állás - azaz a döntési helyzet



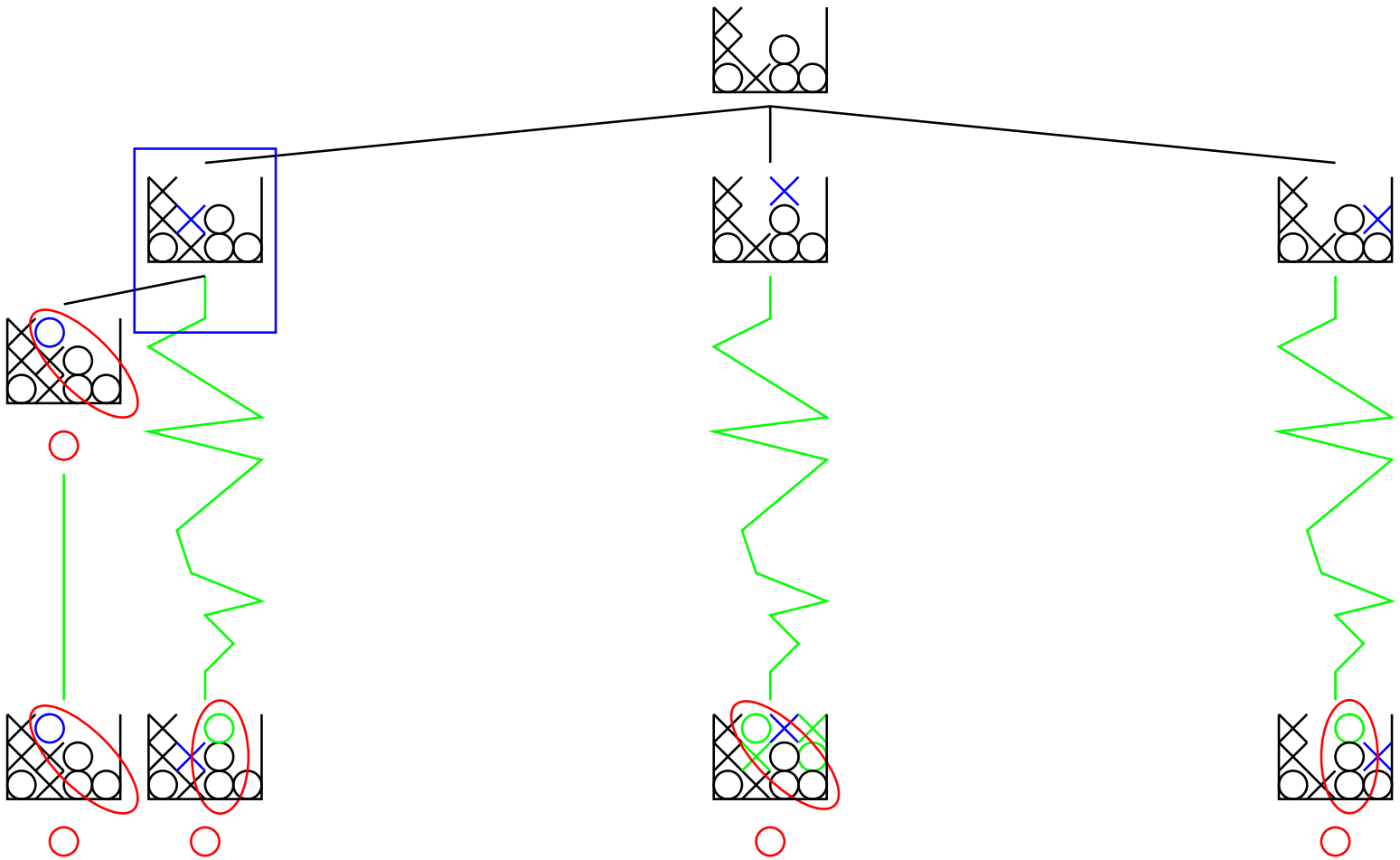
Inicializálás



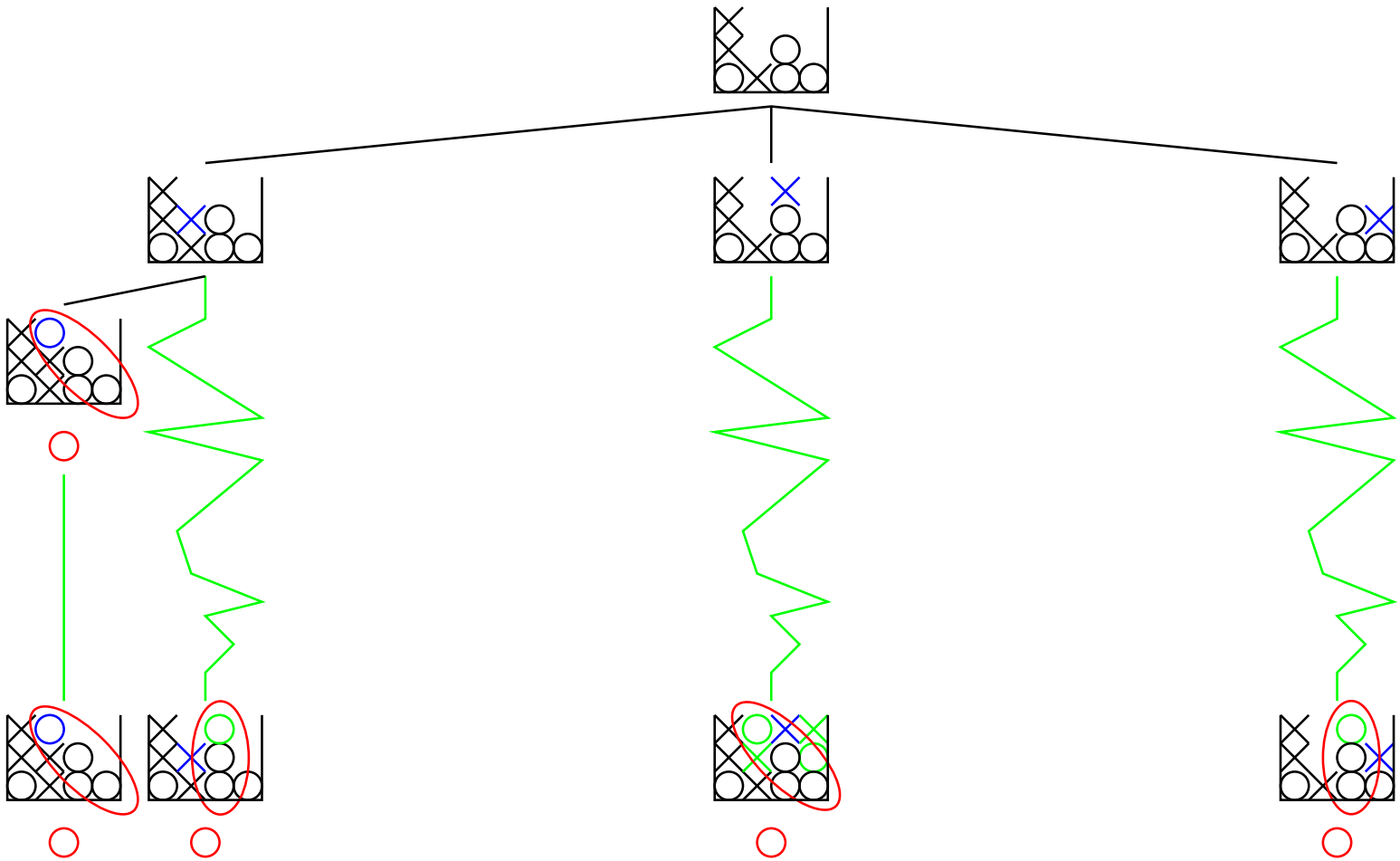
1. iteráció



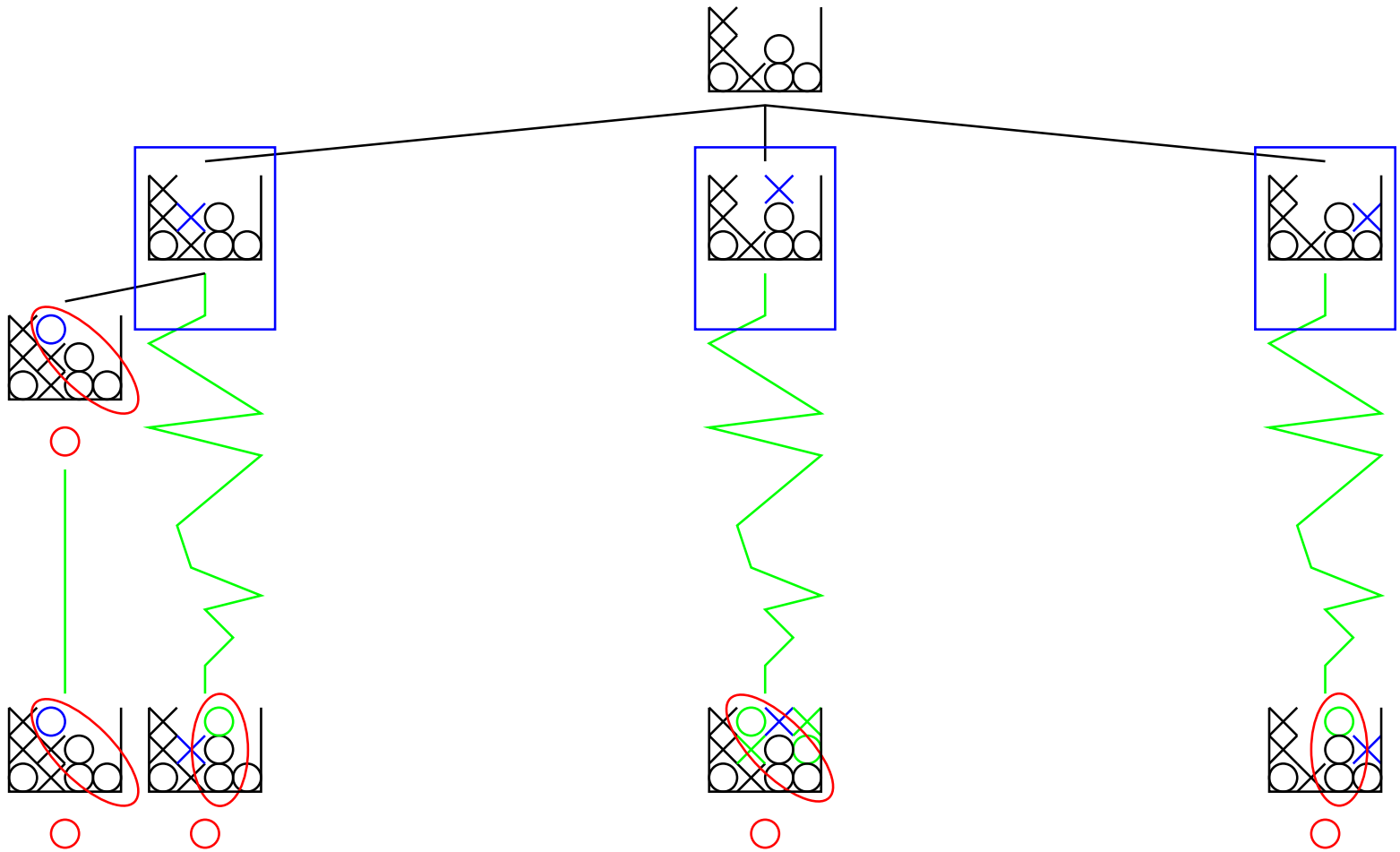
1. iteráció



1. iteráció

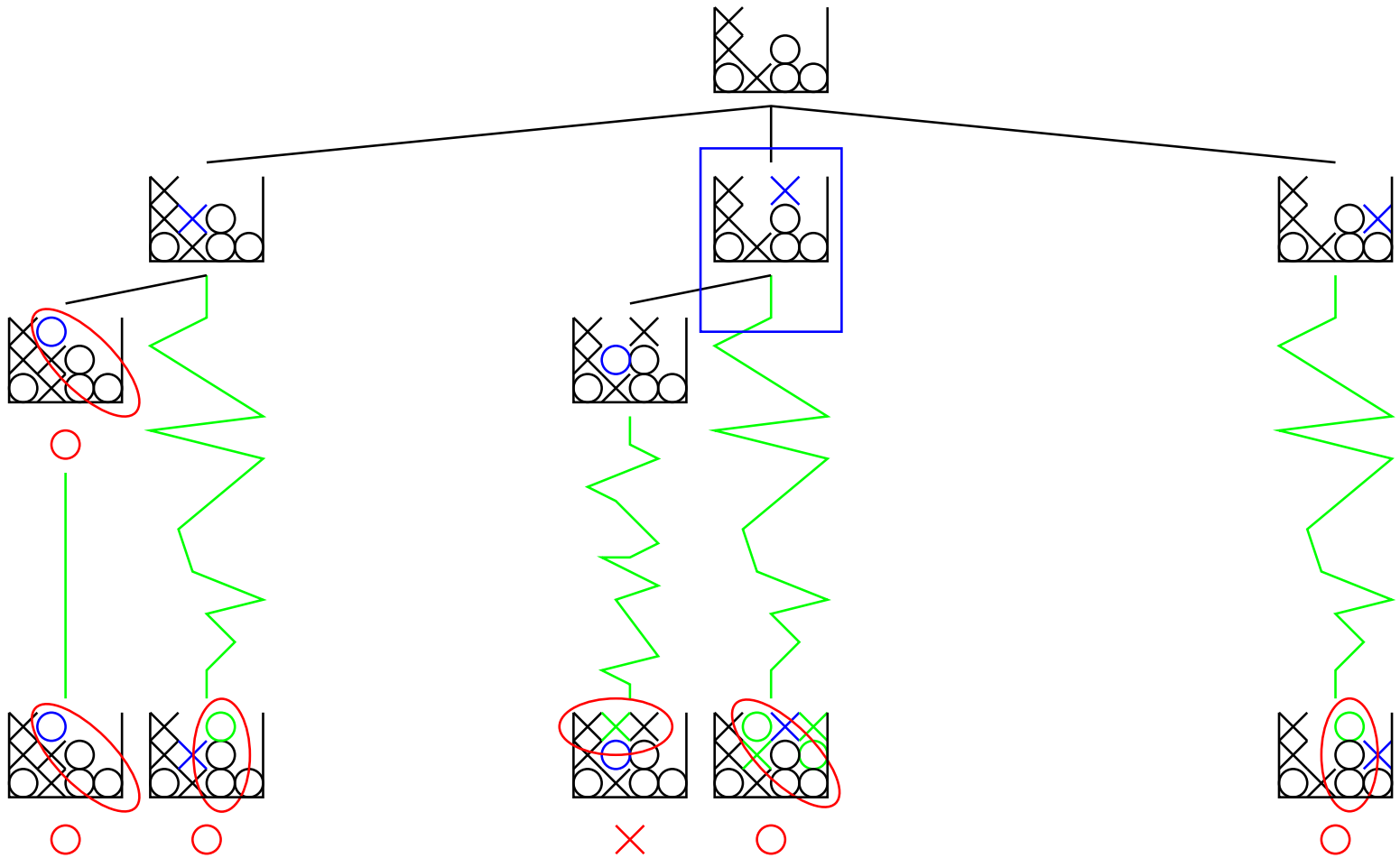


2. iteráció



$$\frac{0}{2} + \sqrt{\frac{2 \ln 4}{2}} \approx 1,1774 \qquad \frac{0}{1} + \sqrt{\frac{2 \ln 4}{1}} \approx 1,6651 \qquad \frac{0}{1} + \sqrt{\frac{2 \ln 4}{1}} \approx 1,6651$$

2. iteráció



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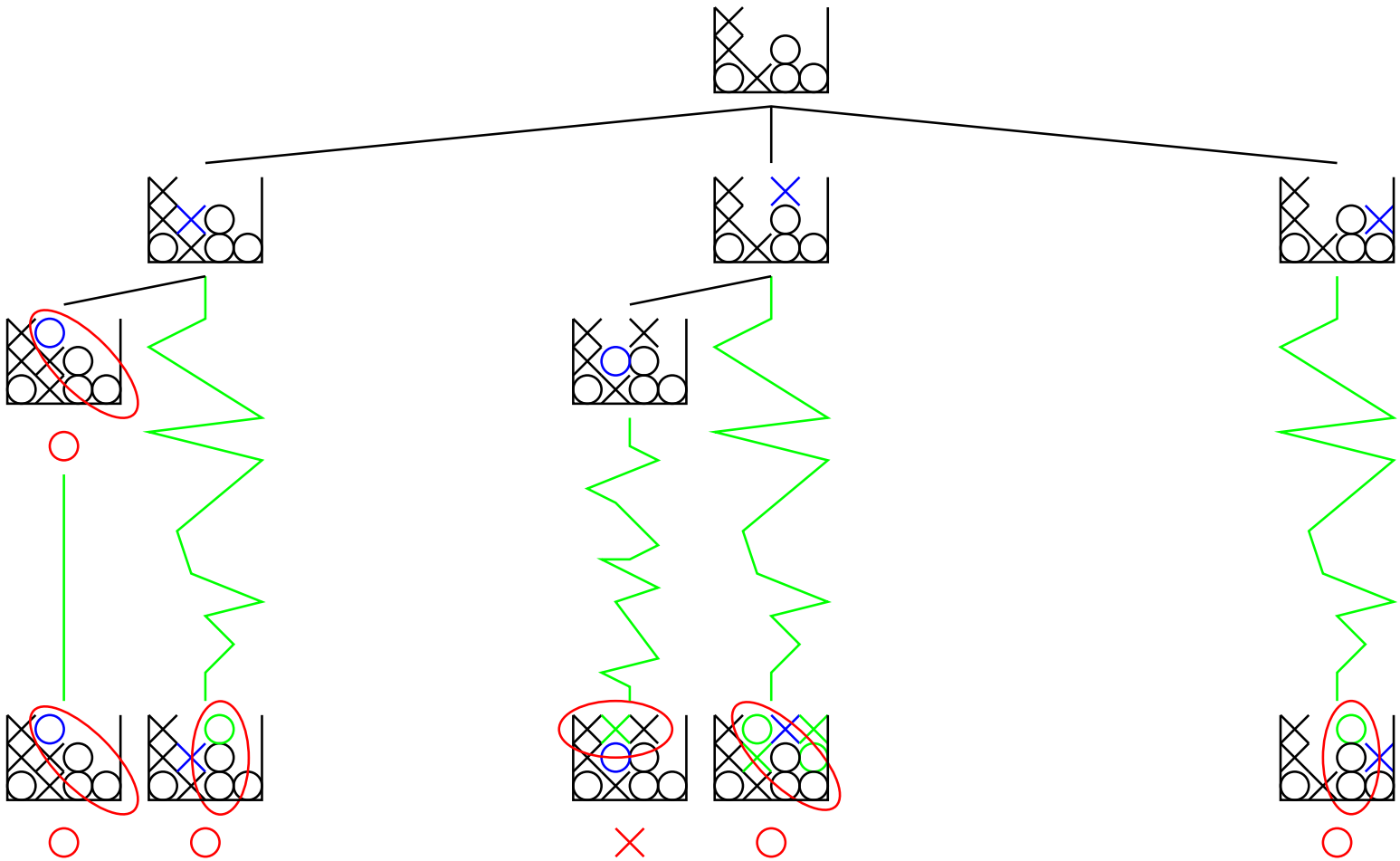
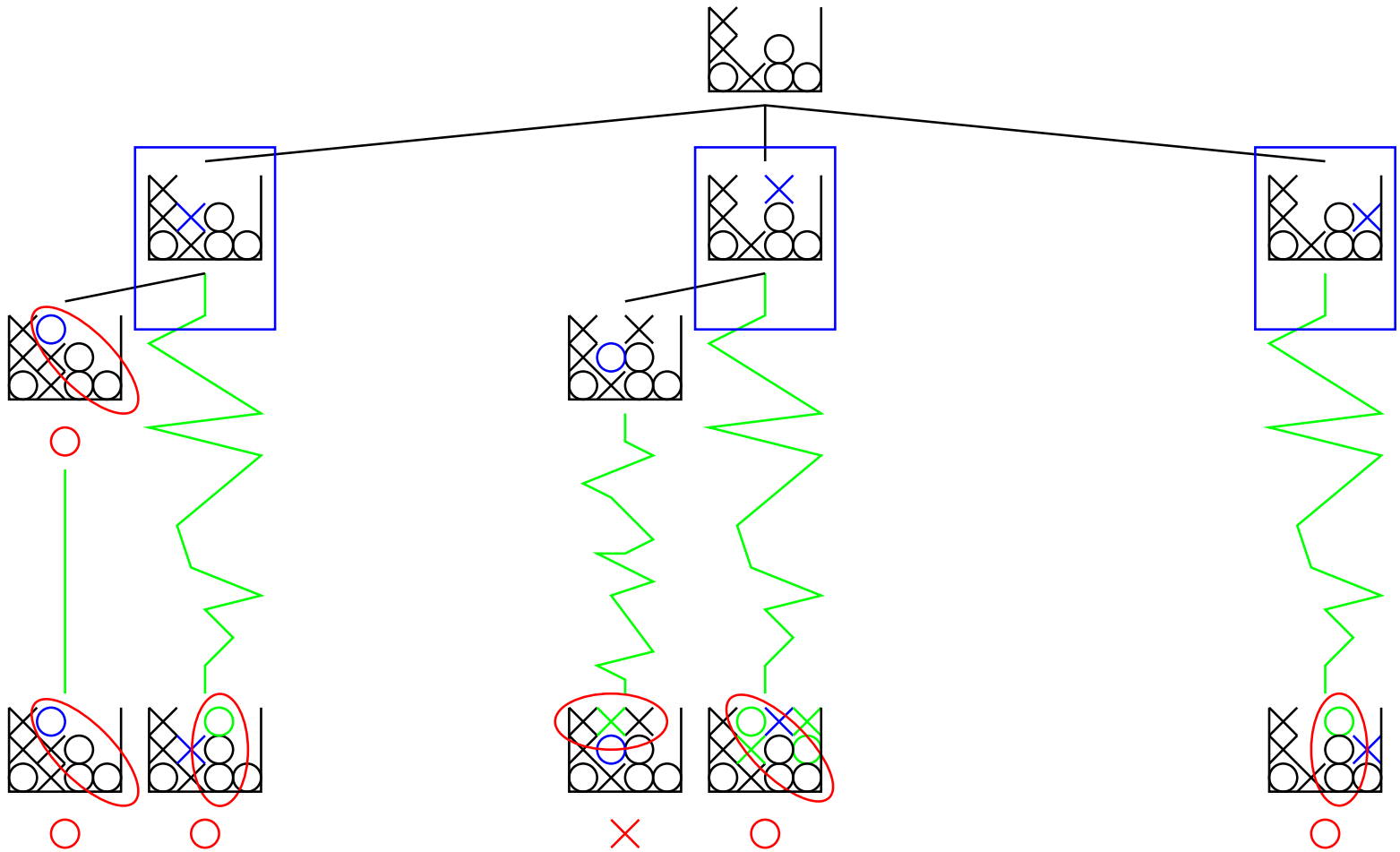
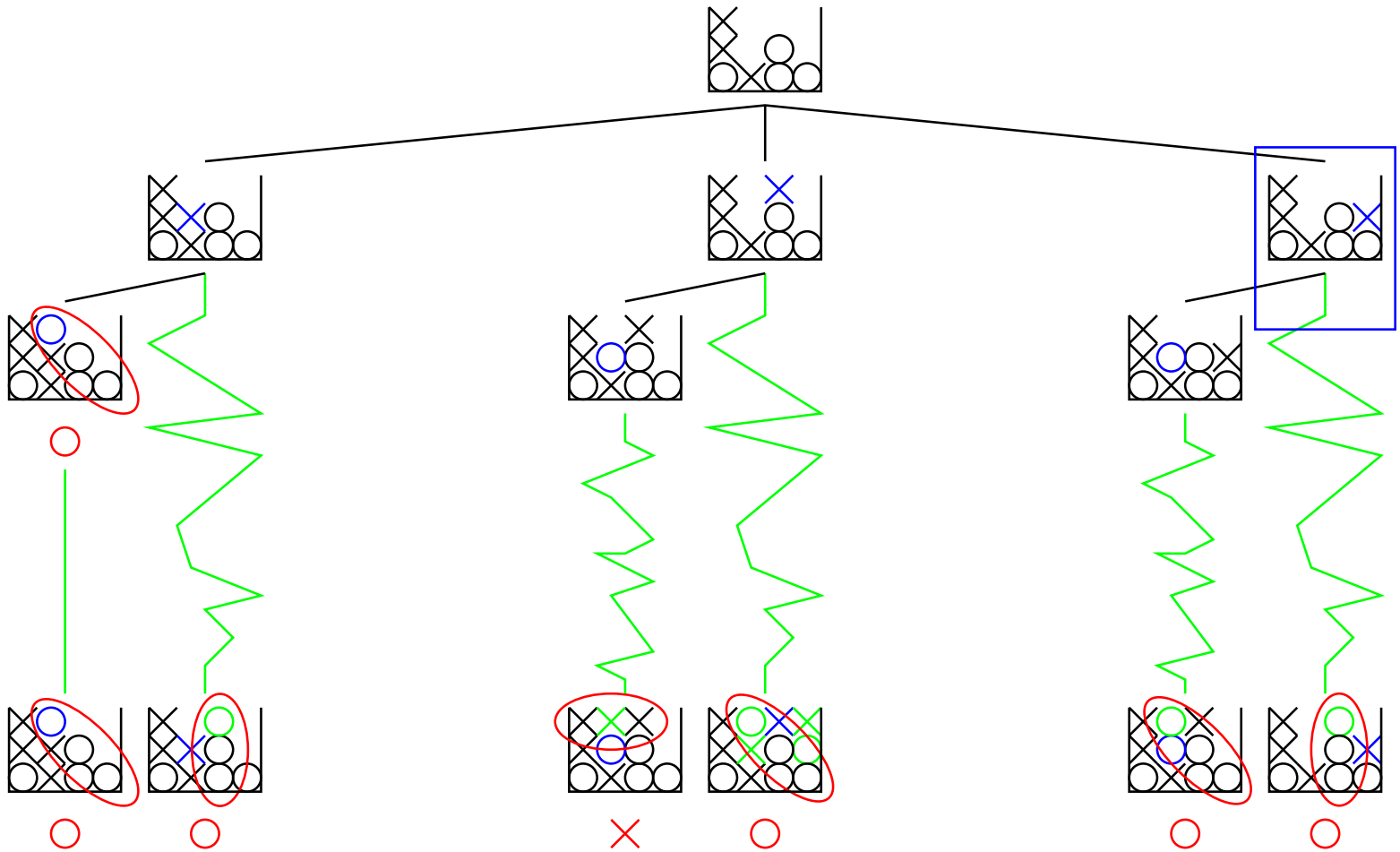


3. iteráció



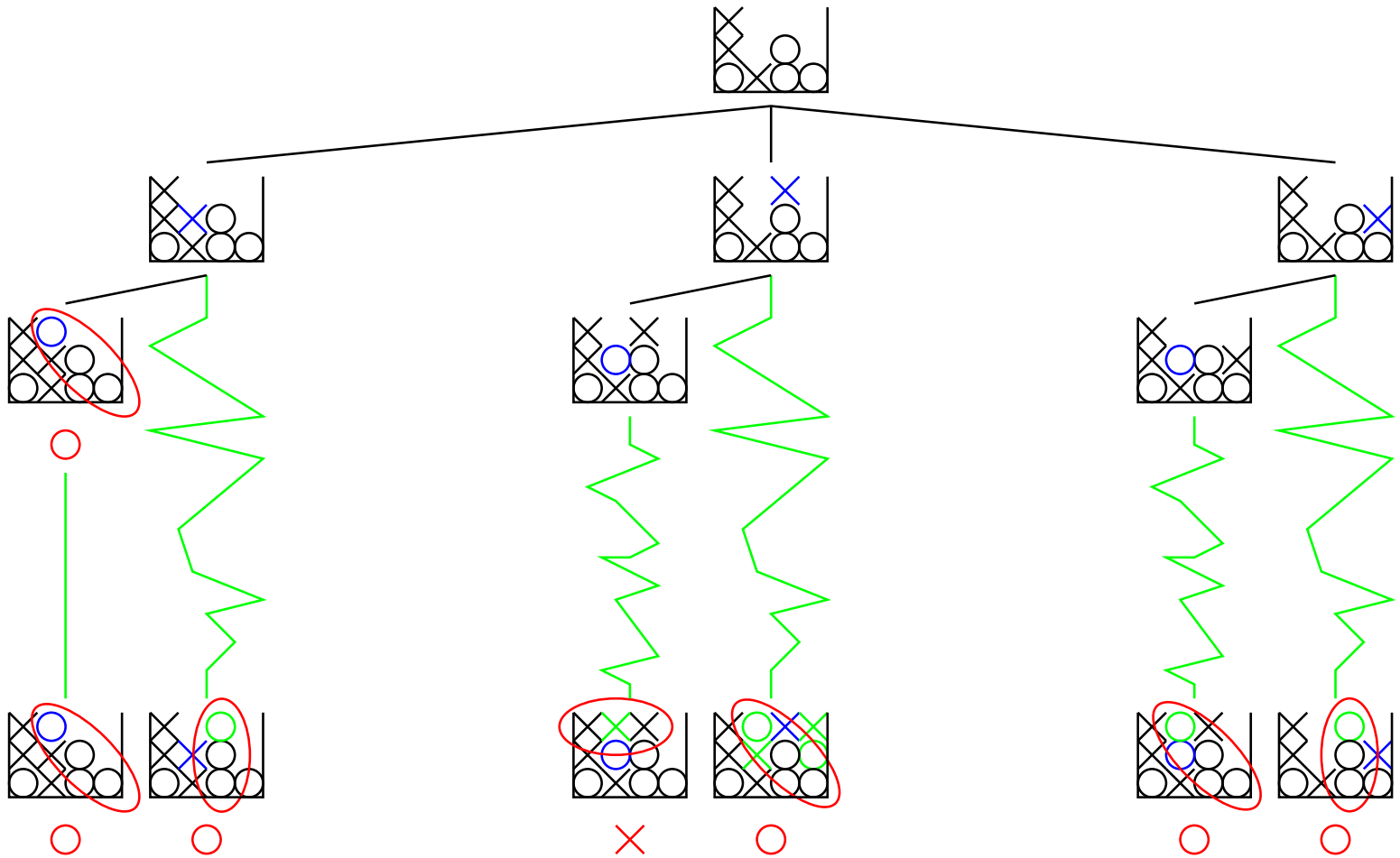
$$\frac{0}{2} + \sqrt{\frac{2 \ln 5}{2}} \approx 1,2686 \qquad \frac{1}{2} + \sqrt{\frac{2 \ln 5}{2}} \approx 1,7686 \qquad \frac{0}{1} + \sqrt{\frac{2 \ln 5}{1}} \approx 1,7941$$

3. iteráció

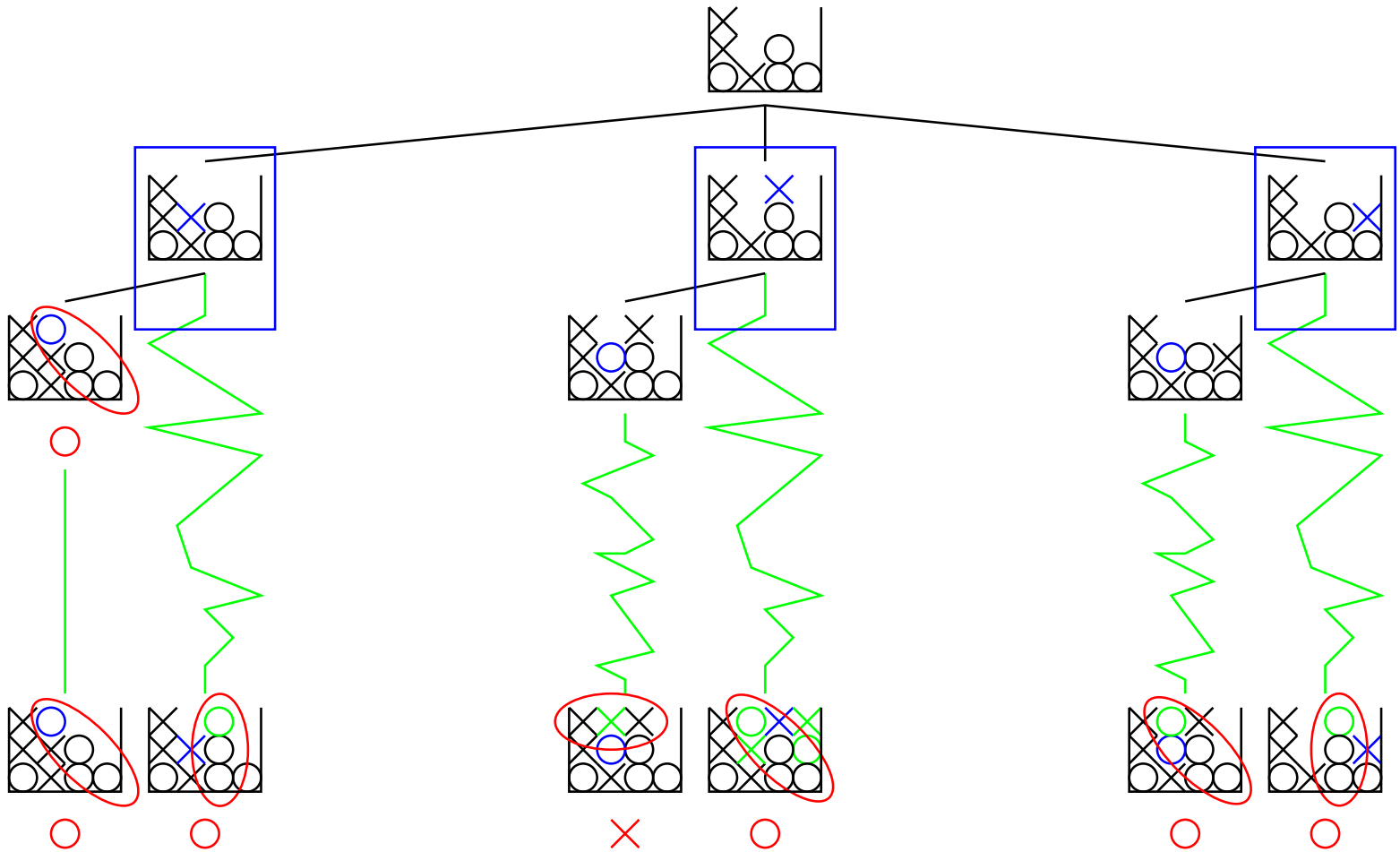


$$\frac{0}{2} + \sqrt{\frac{2 \ln 5}{2}} \approx 1,2686 \qquad \frac{1}{2} + \sqrt{\frac{2 \ln 5}{2}} \approx 1,7686 \qquad \frac{0}{1} + \sqrt{\frac{2 \ln 5}{1}} \approx 1,7941$$

3. iteráció

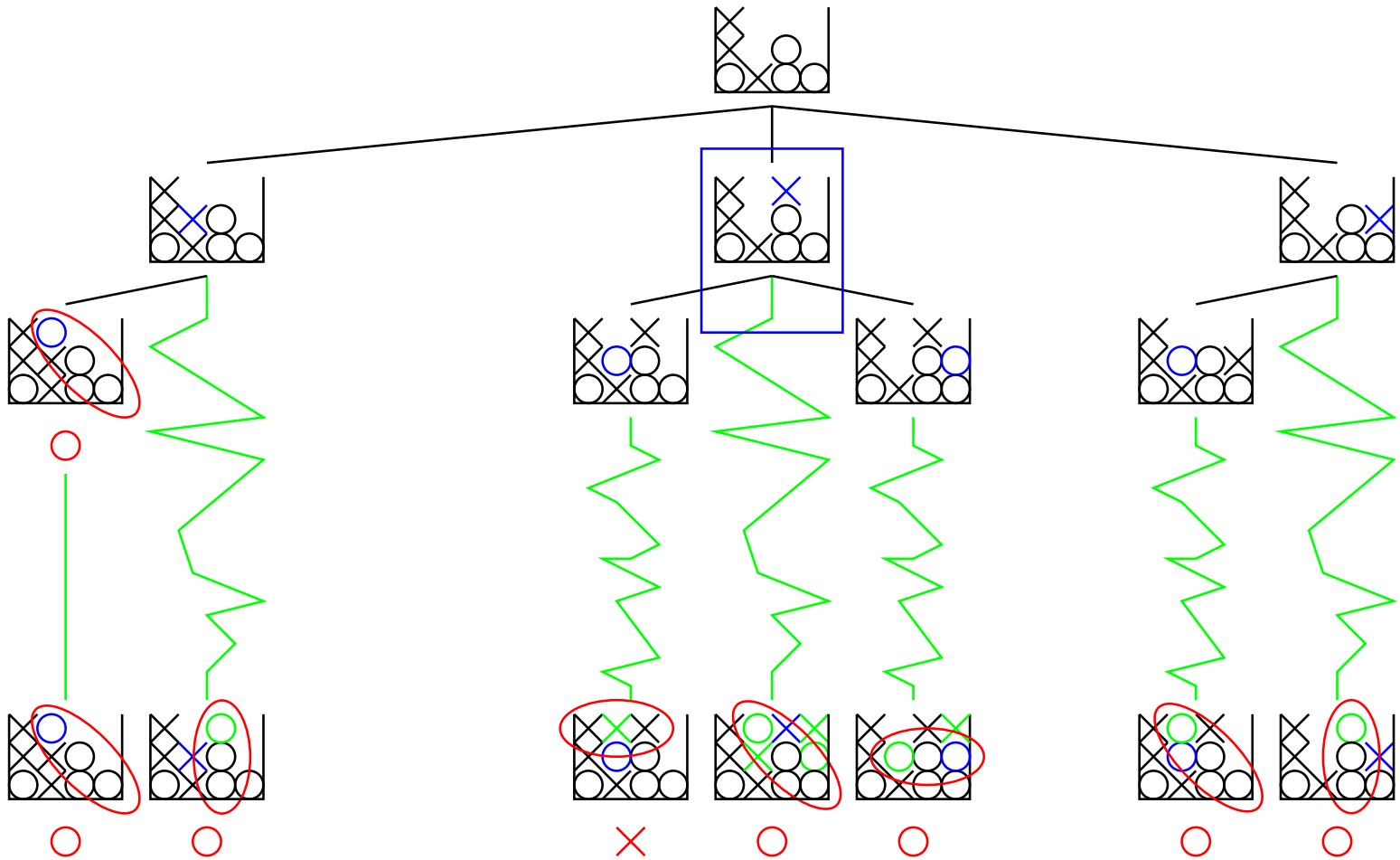


4. iteráció



$$\frac{0}{2} + \sqrt{\frac{2 \ln 6}{2}} \approx 1,3386 \qquad \frac{1}{2} + \sqrt{\frac{2 \ln 6}{2}} \approx 1,8386 \qquad \frac{0}{2} + \sqrt{\frac{2 \ln 6}{2}} \approx 1,3386$$

4. iteráció



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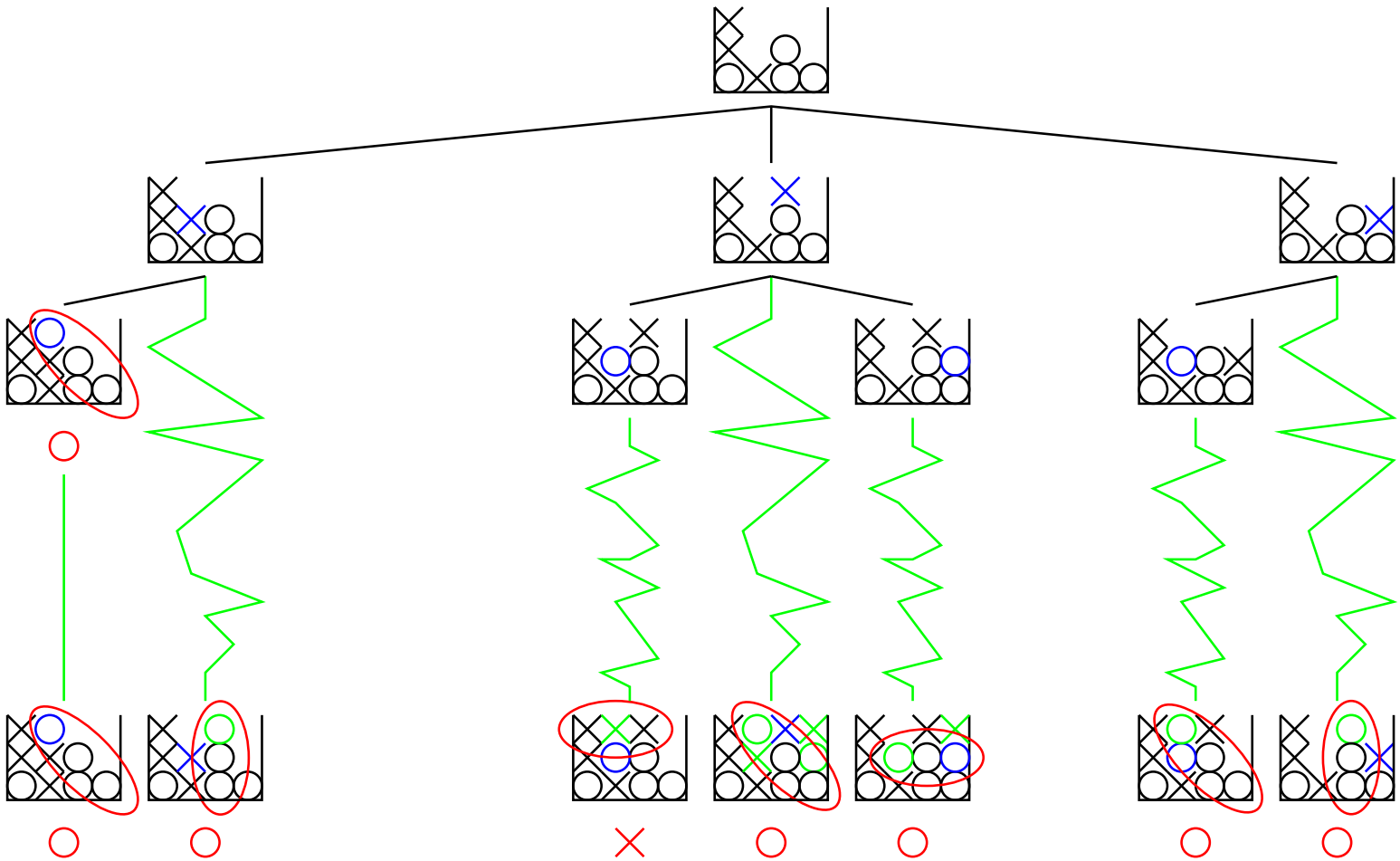
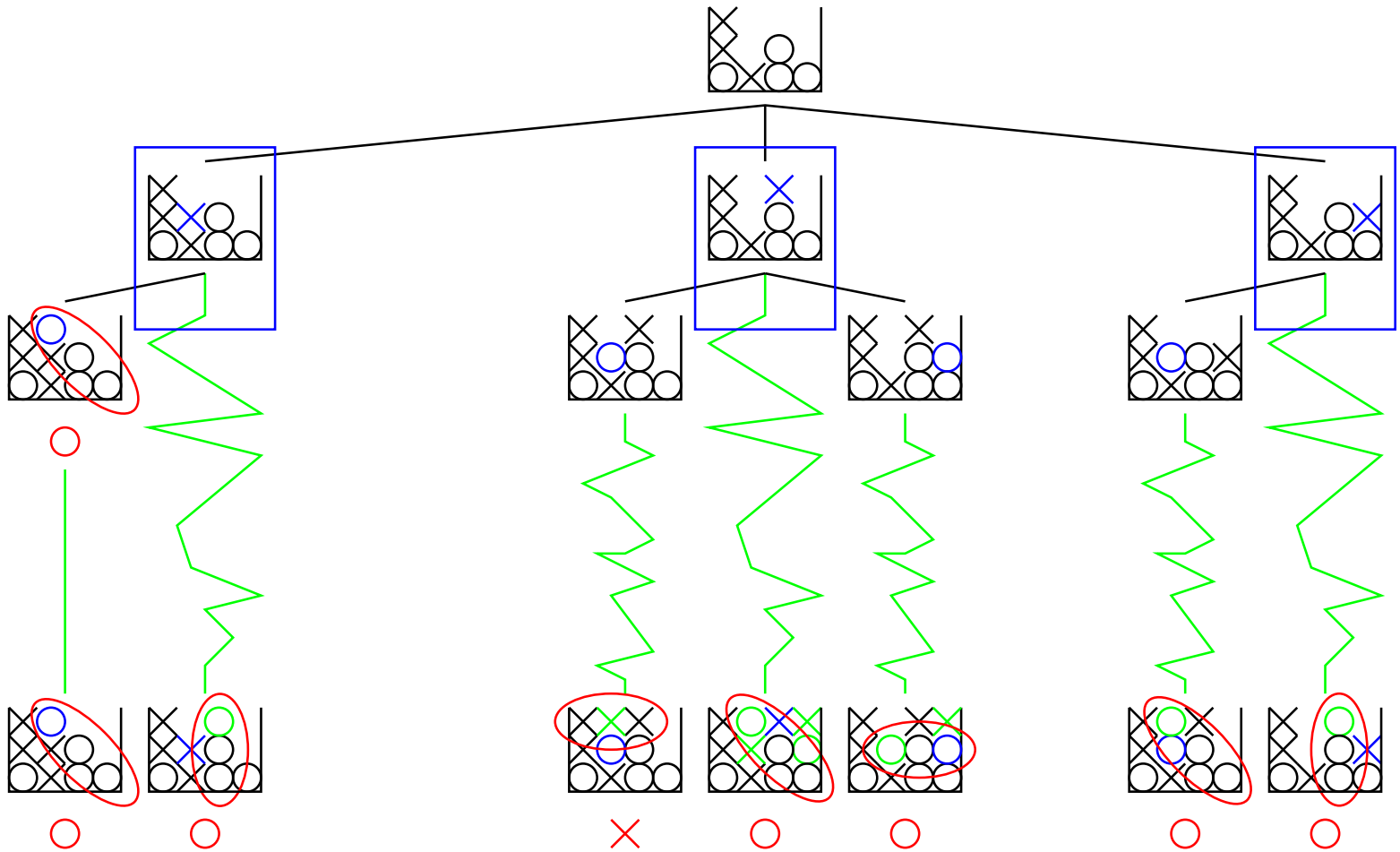
4. iteráció

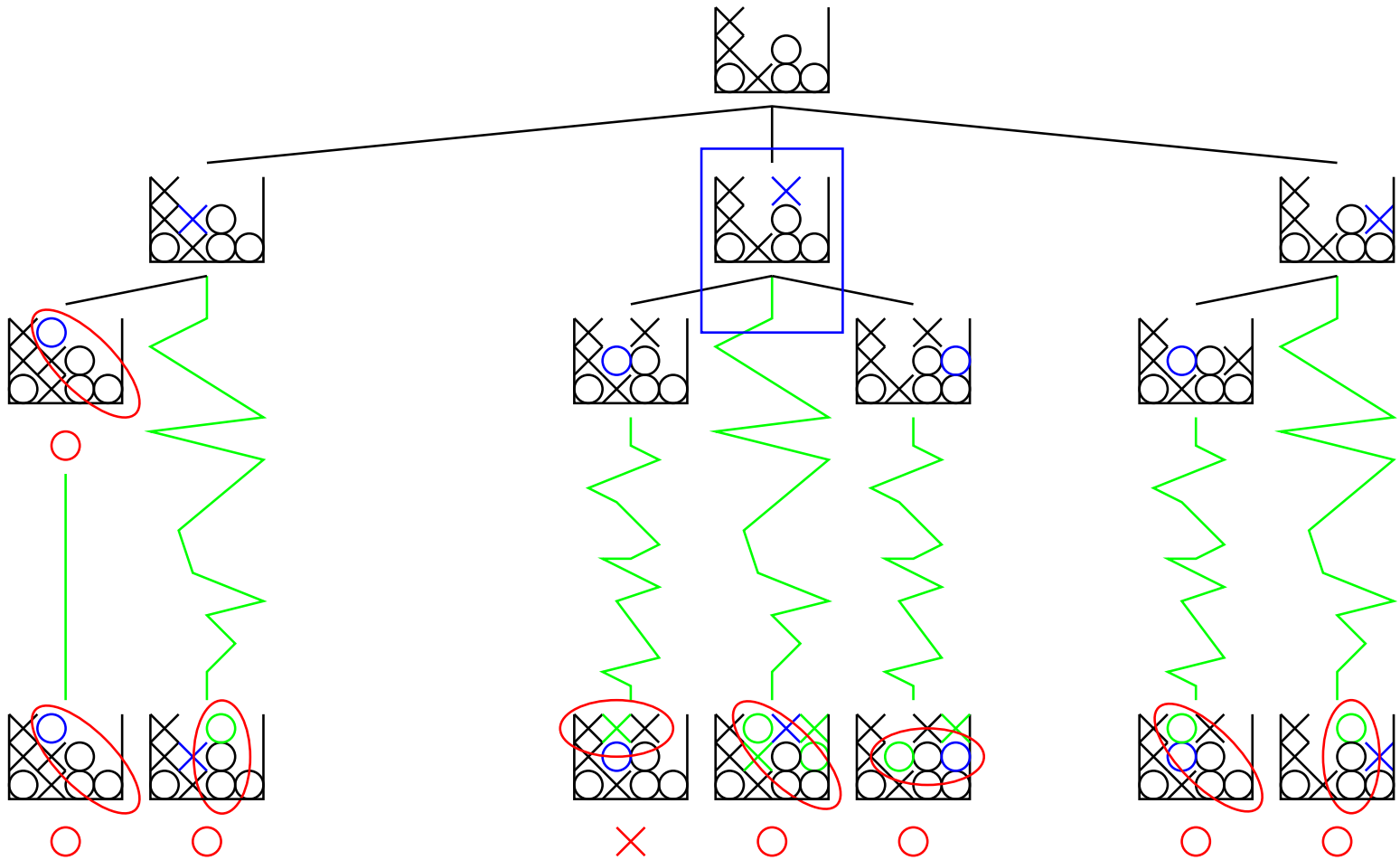


5. iteráció



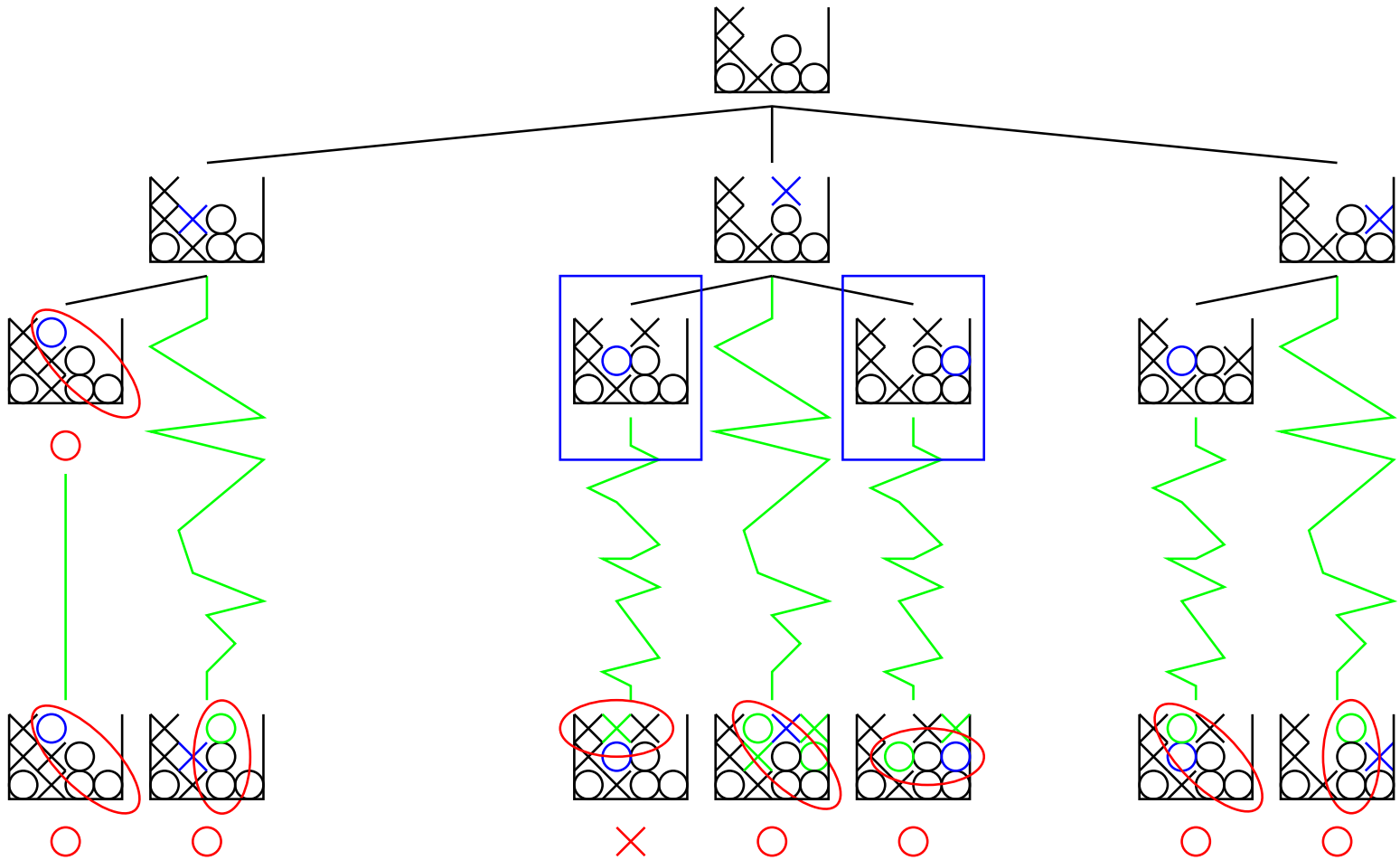
$$\frac{0}{2} + \sqrt{\frac{2 \ln 7}{2}} \approx 1,3943 \qquad \frac{1}{3} + \sqrt{\frac{2 \ln 7}{3}} \approx 1,4723 \qquad \frac{0}{2} + \sqrt{\frac{2 \ln 7}{2}} \approx 1,3943$$

5. iteráció



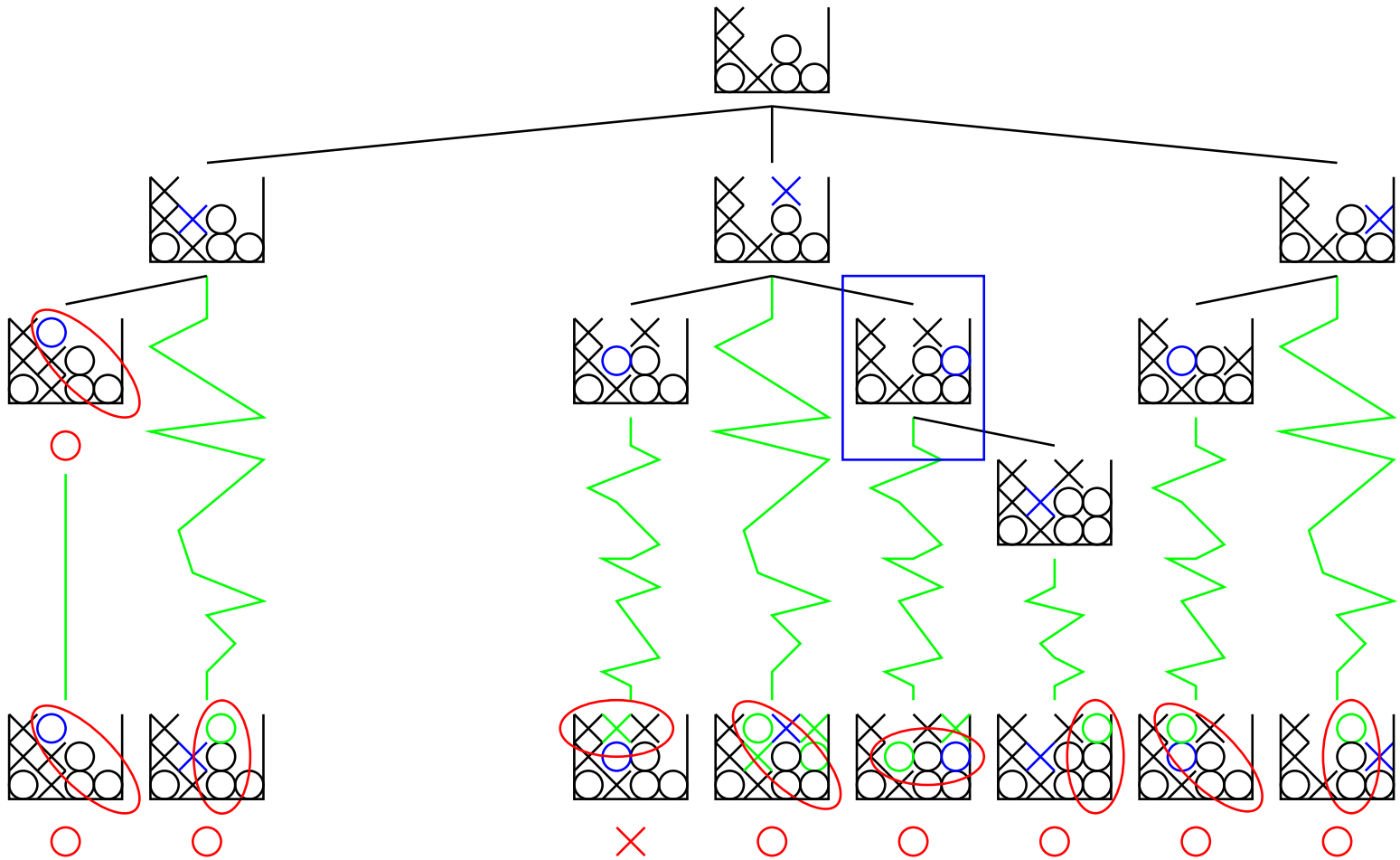
$$\frac{0}{2} + \sqrt{\frac{2 \ln 7}{2}} \approx 1,3943 \qquad \frac{1}{3} + \sqrt{\frac{2 \ln 7}{3}} \approx 1,4723 \qquad \frac{0}{2} + \sqrt{\frac{2 \ln 7}{2}} \approx 1,3943$$

5. iteráció



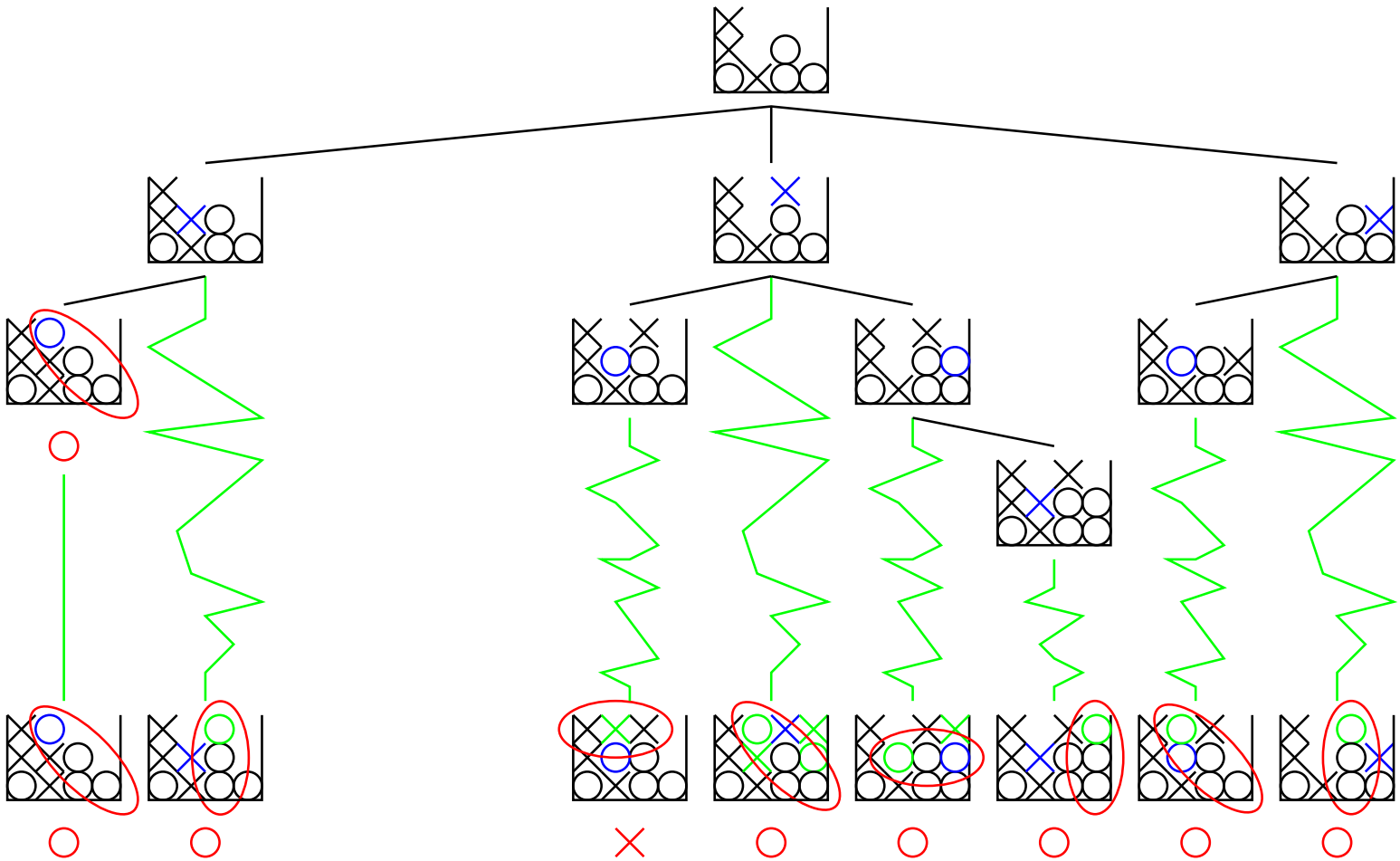
Ezen a ponton az ellenfél szerepét játszuk!

5. iteráció

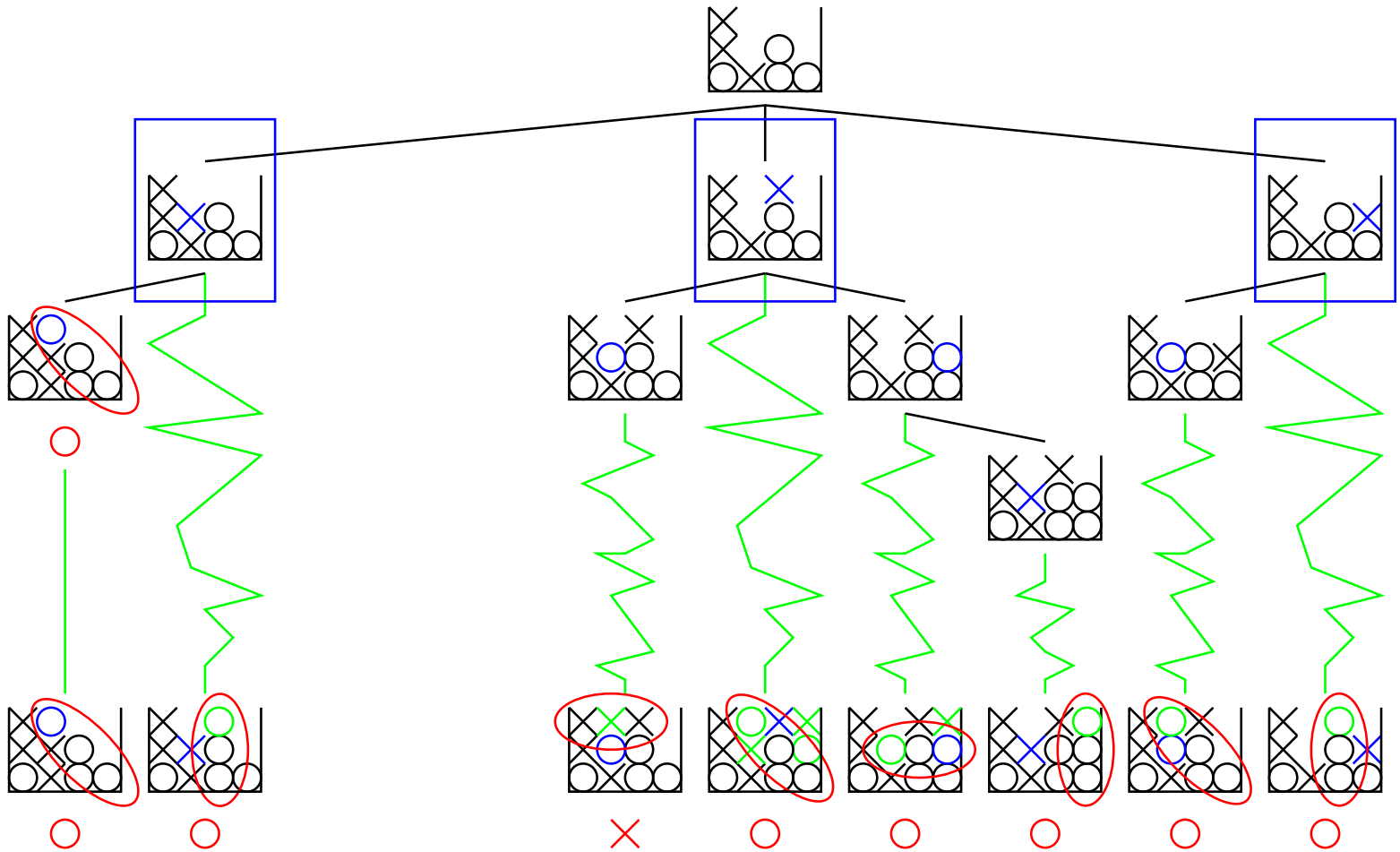


Ezen a ponton az ellenfél szerepét játszuk!

5. iteráció

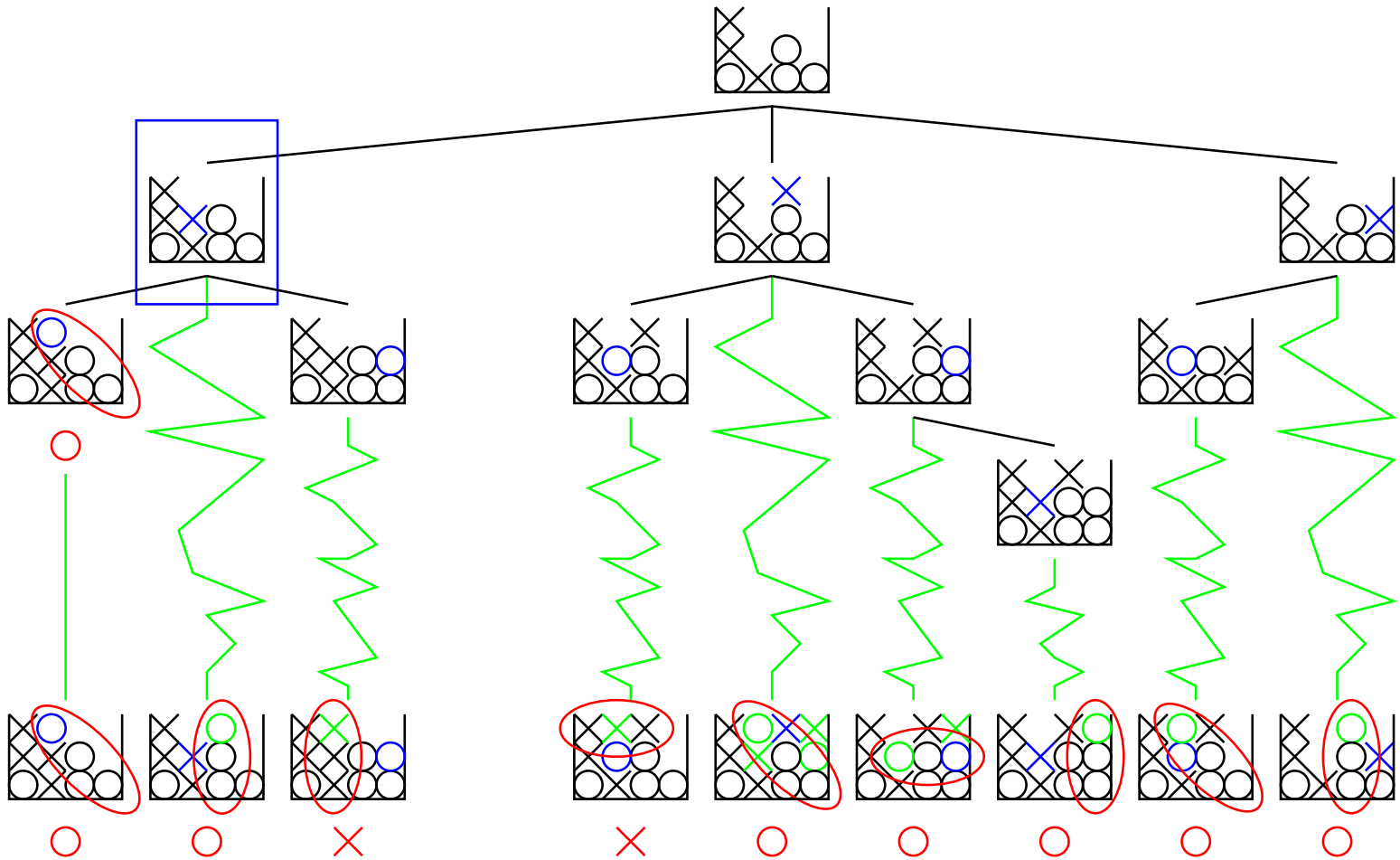


6. iteráció



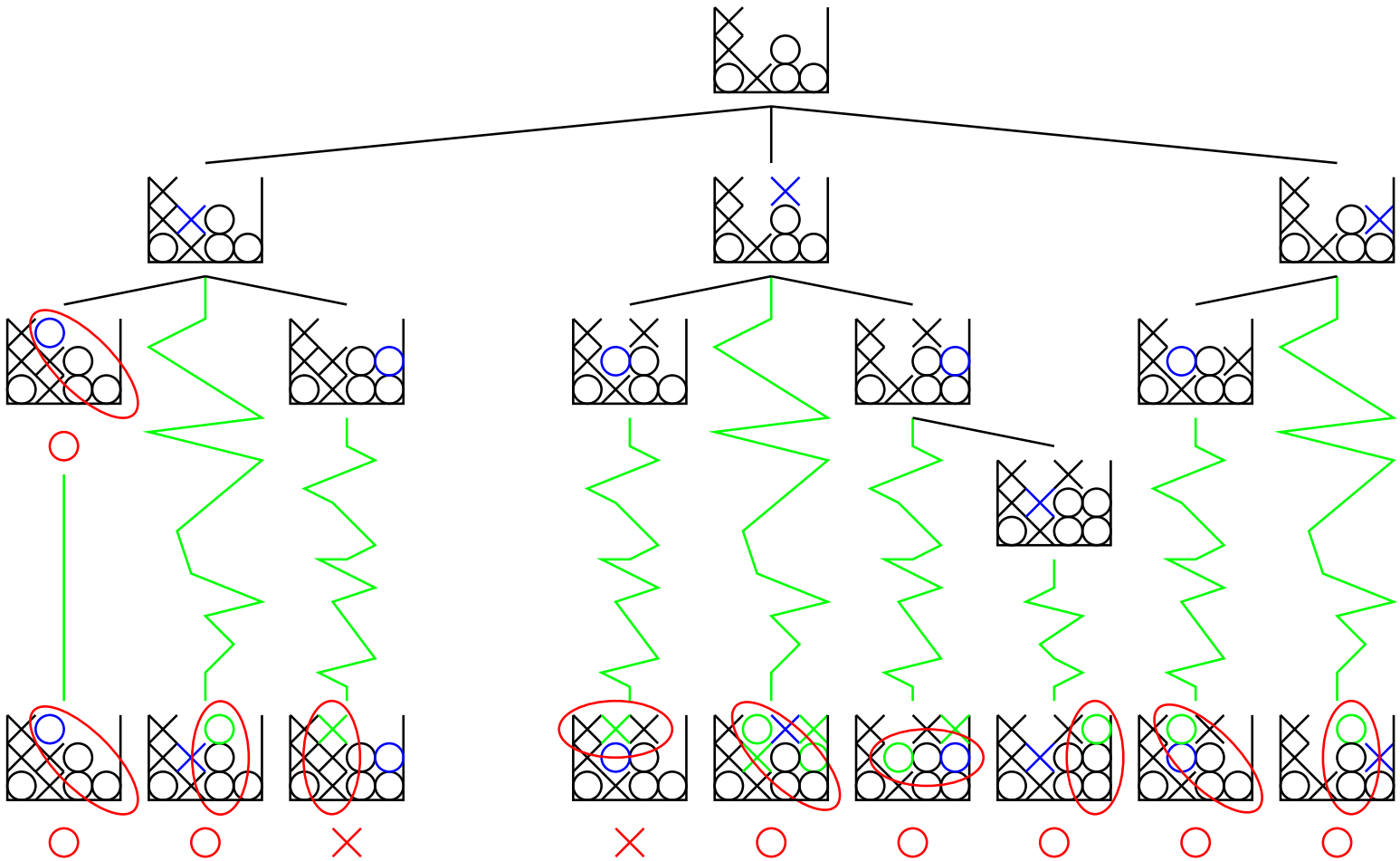
$$\frac{0}{2} + \sqrt{\frac{2 \ln 8}{2}} \approx 1,4420 \qquad \frac{1}{4} + \sqrt{\frac{2 \ln 8}{4}} \approx 1,2697 \qquad \frac{0}{2} + \sqrt{\frac{2 \ln 8}{2}} \approx 1,4420$$

6. iteráció

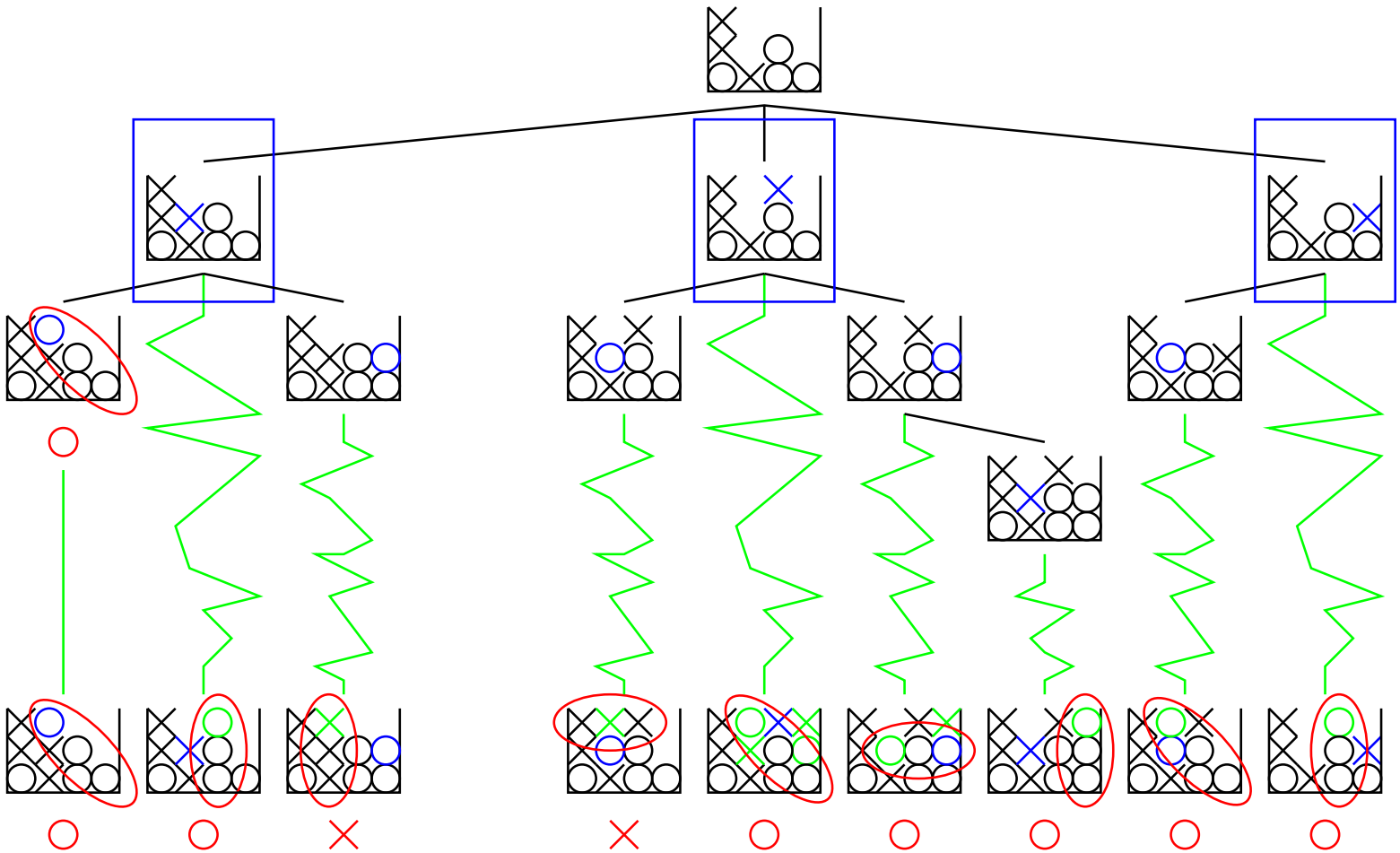


$$\frac{0}{2} + \sqrt{\frac{2 \ln 8}{2}} \approx 1,4420 \qquad \frac{1}{4} + \sqrt{\frac{2 \ln 8}{4}} \approx 1,2697 \qquad \frac{0}{2} + \sqrt{\frac{2 \ln 8}{2}} \approx 1,4420$$

6. iteráció

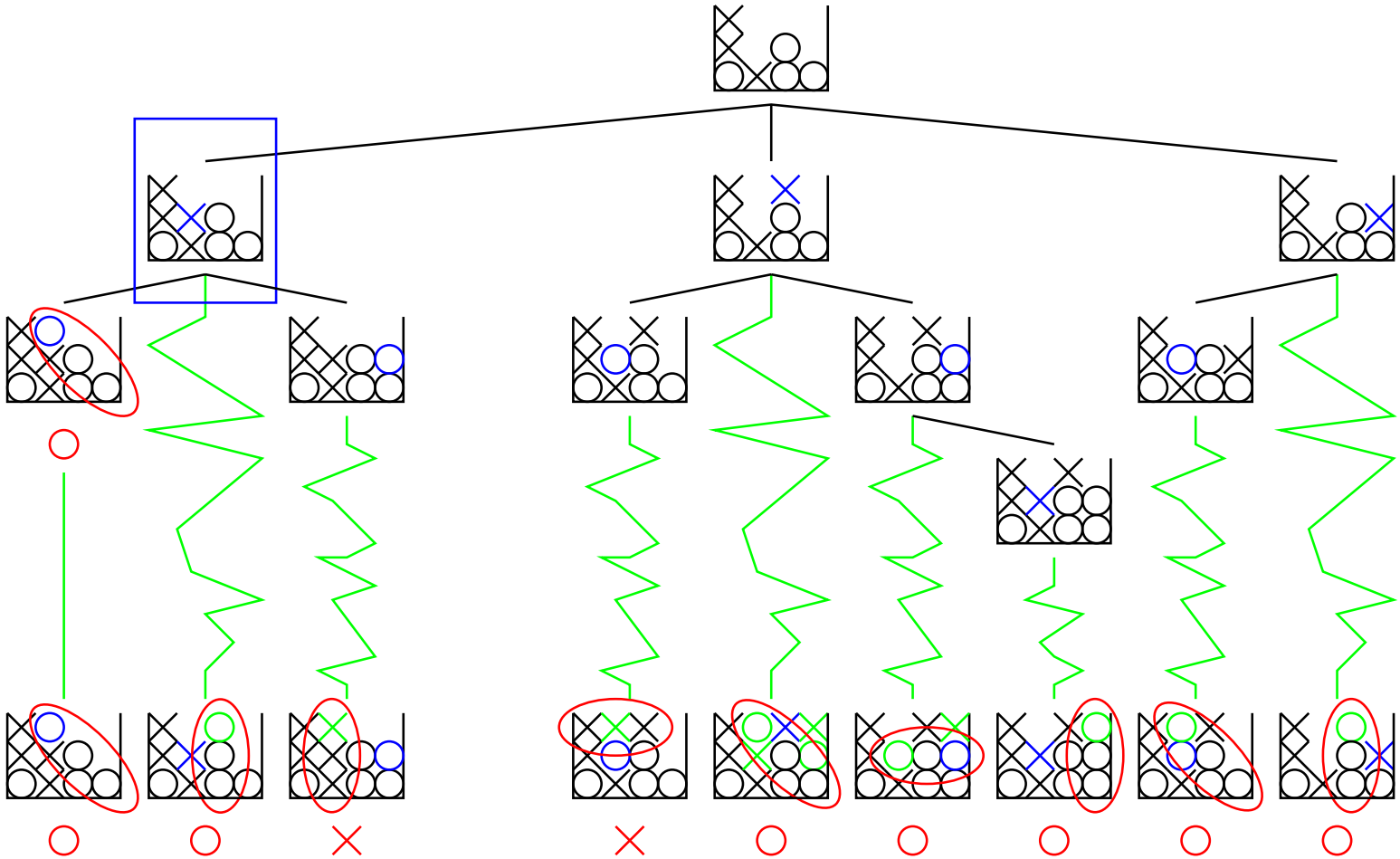


És a döntés



0, 3333 0.25 0

És a döntés



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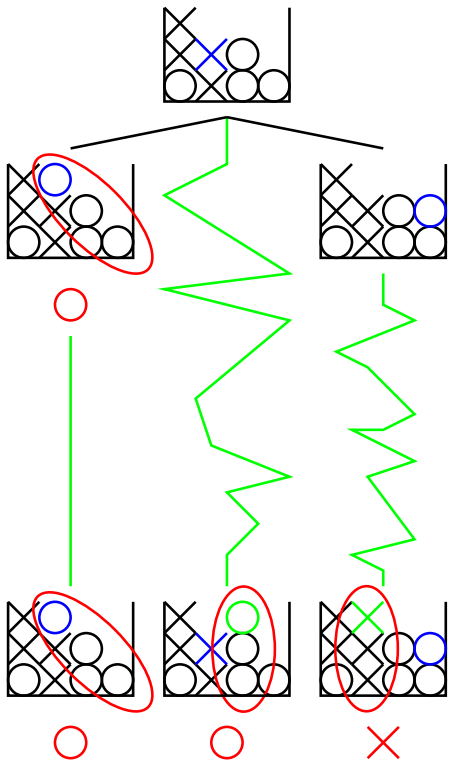
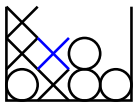


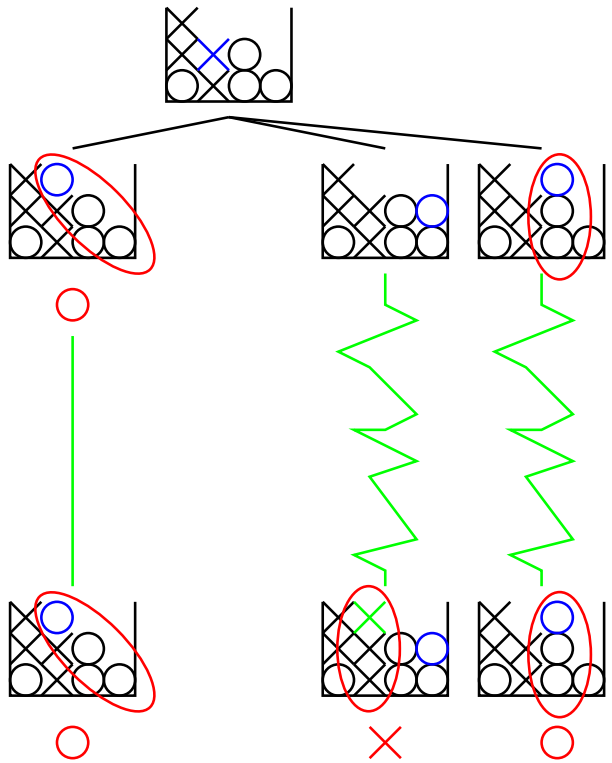
Szerepcsere.

Most az ellenfél jön.
Tfh: ugyanúgy UCT-t használ, de 7 szimulációt végez el egy-egy lépés előtt.

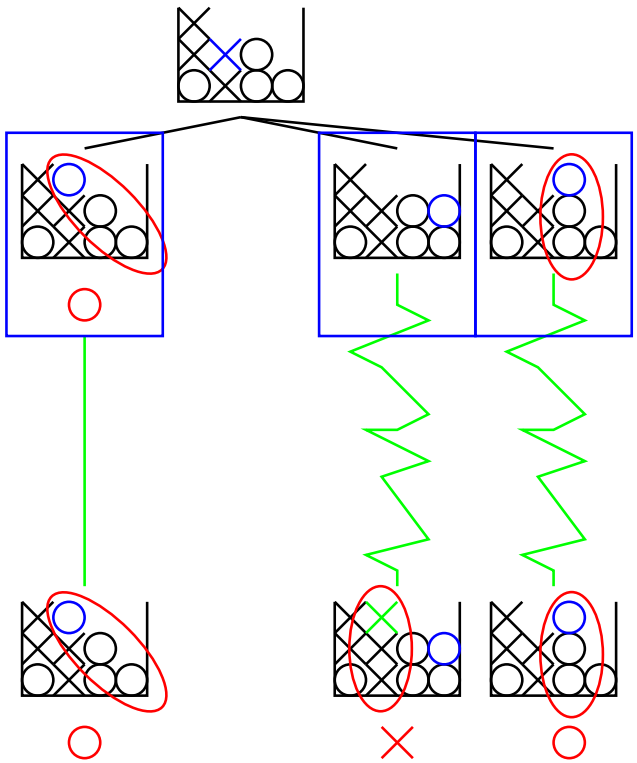
Az aktuális állás.



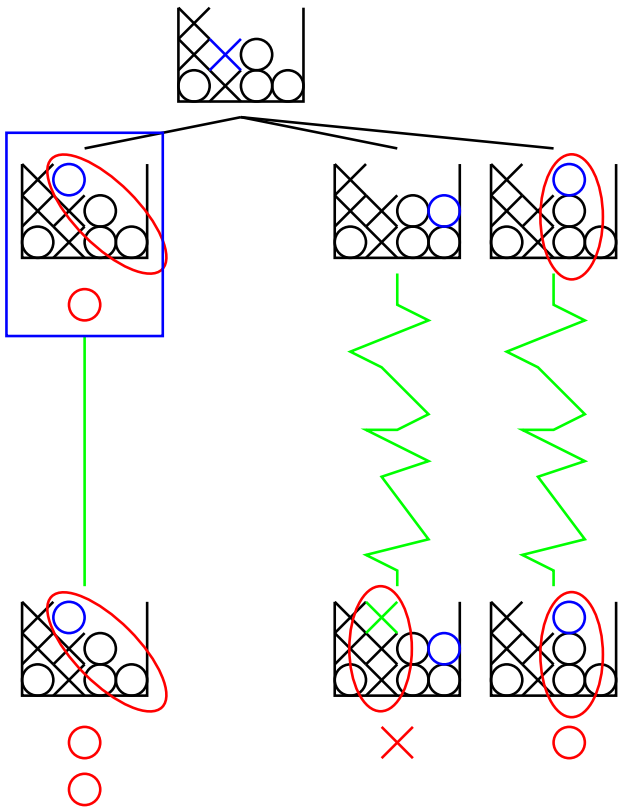
Inicializálás



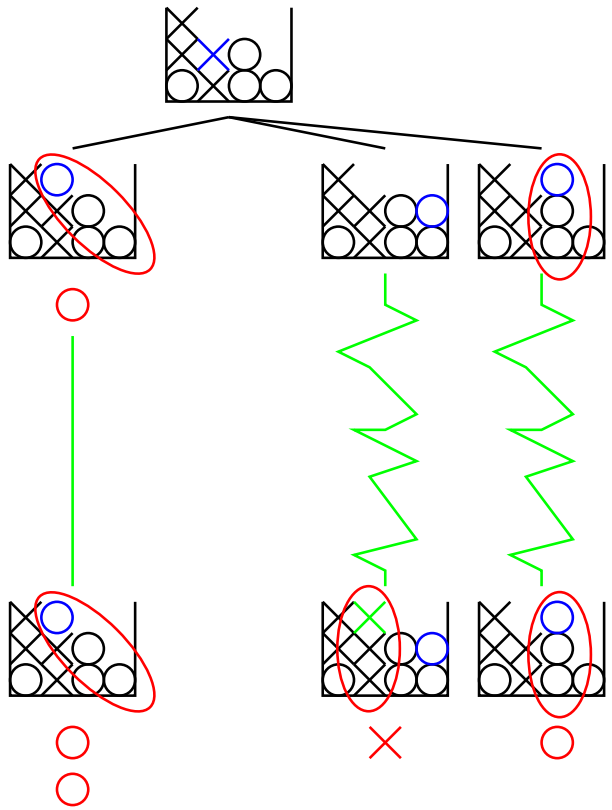
1. iteráció



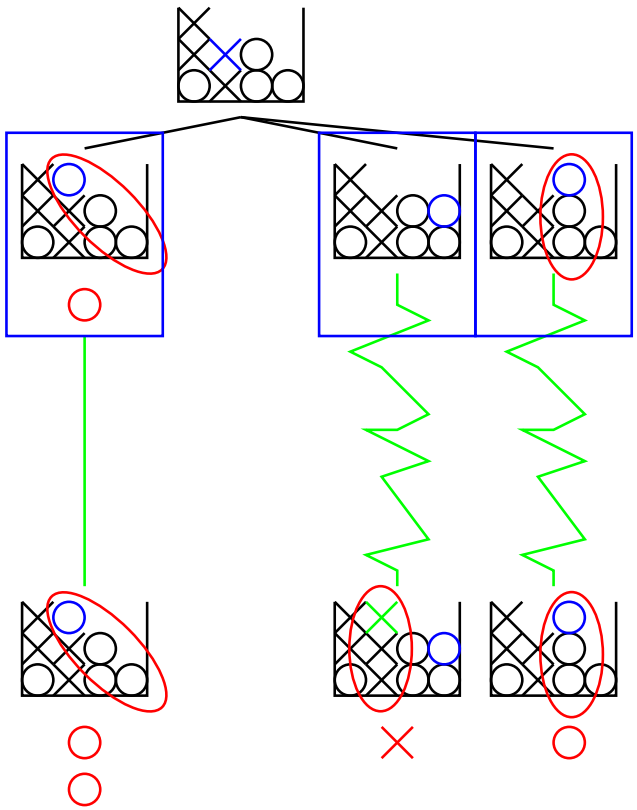
1. iteráció



1. iteráció



2. iteráció



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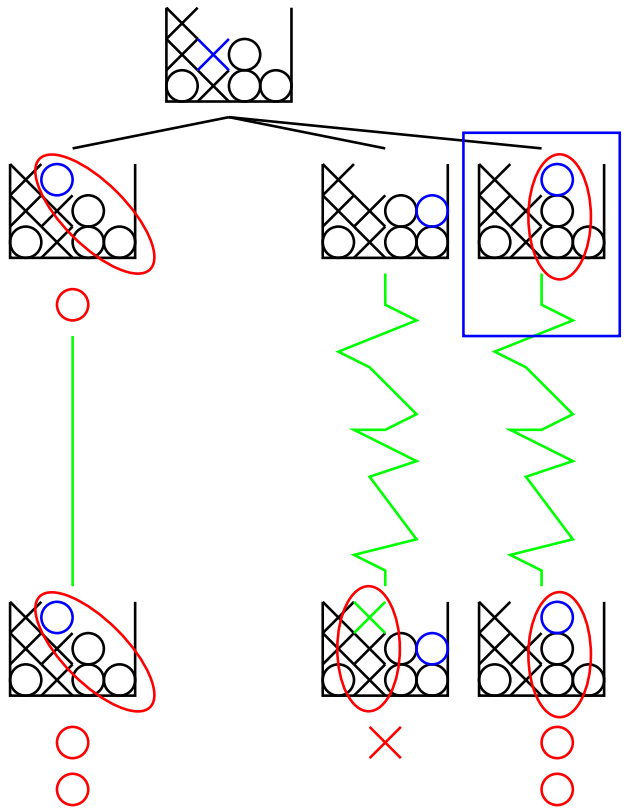

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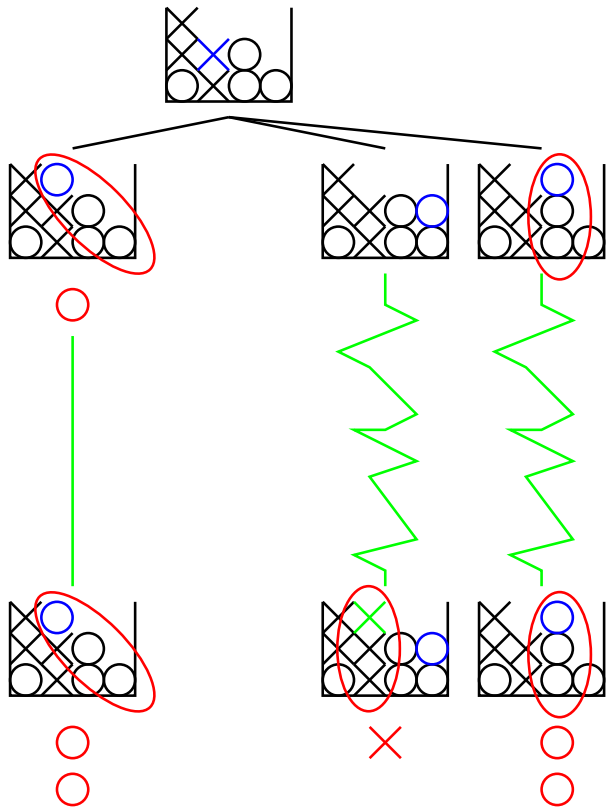
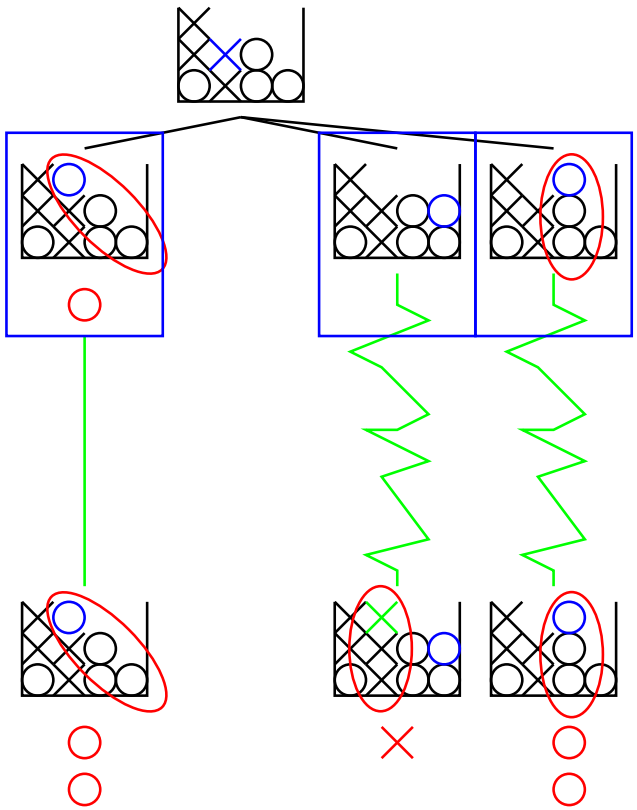
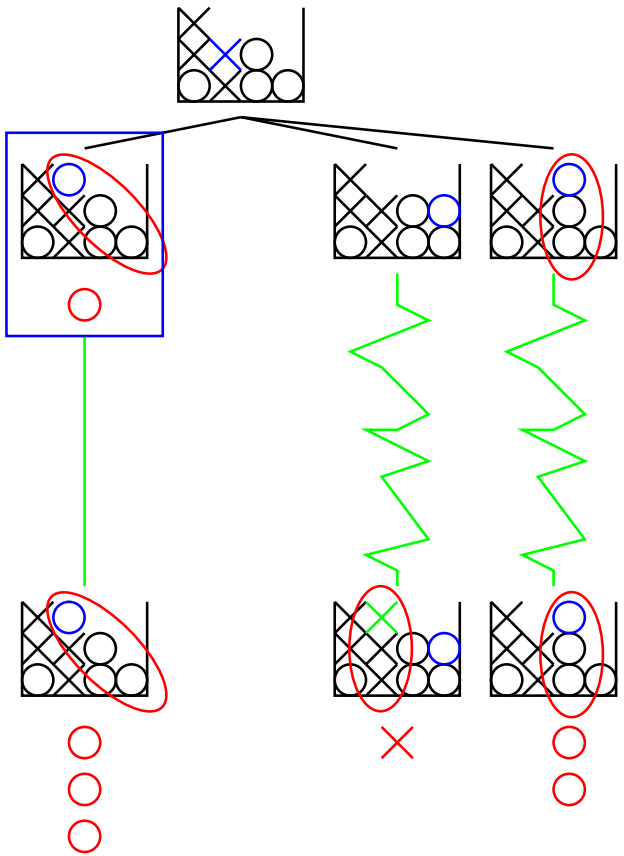


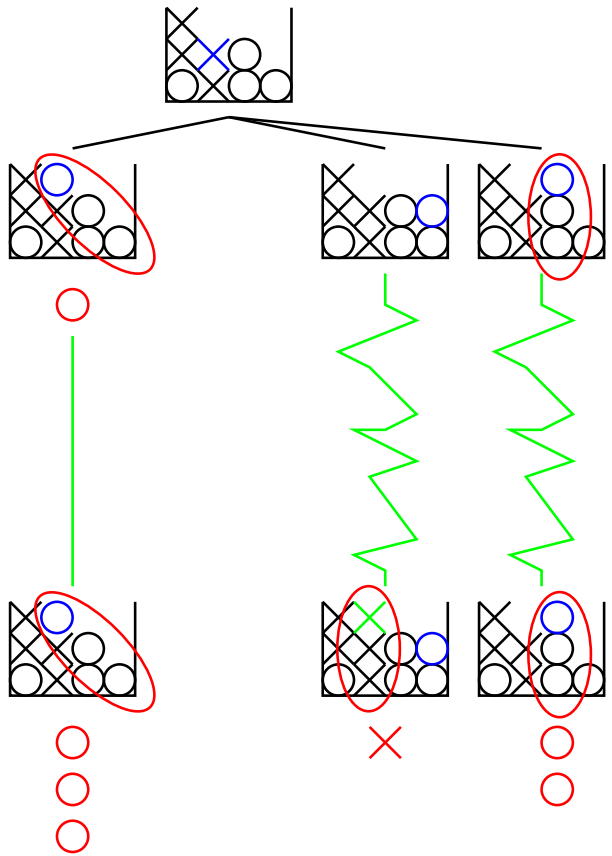
3. iteráció



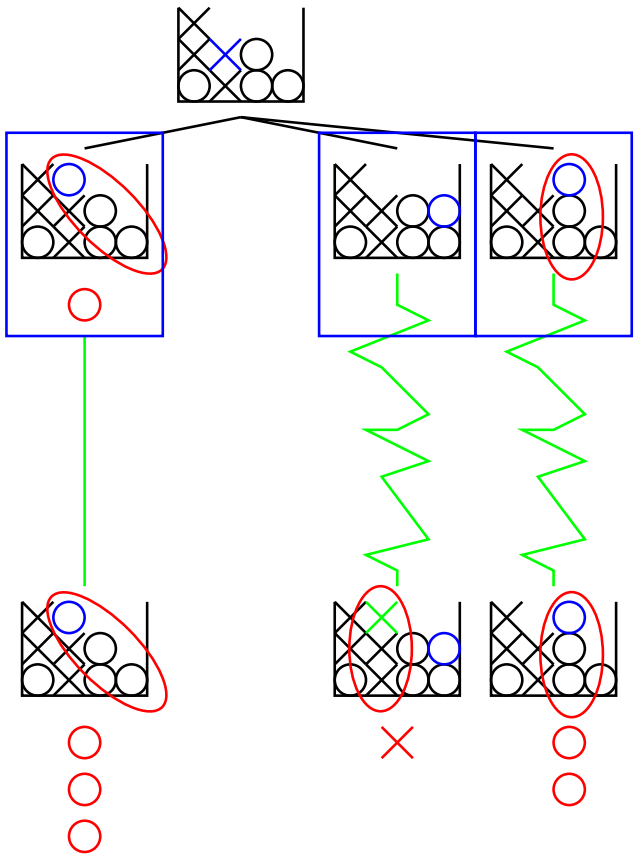
3. iteráció



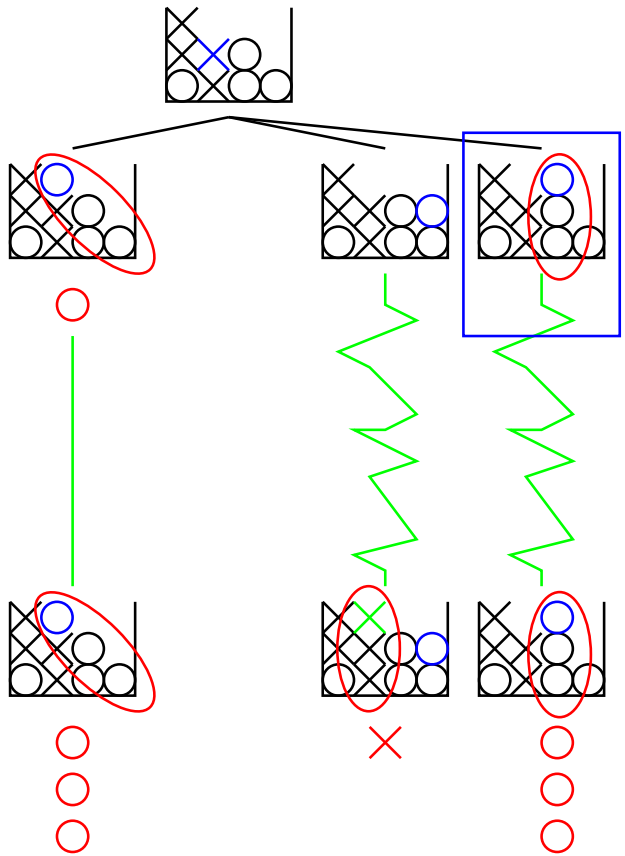
3. iteráció



4. iteráció



4. iteráció



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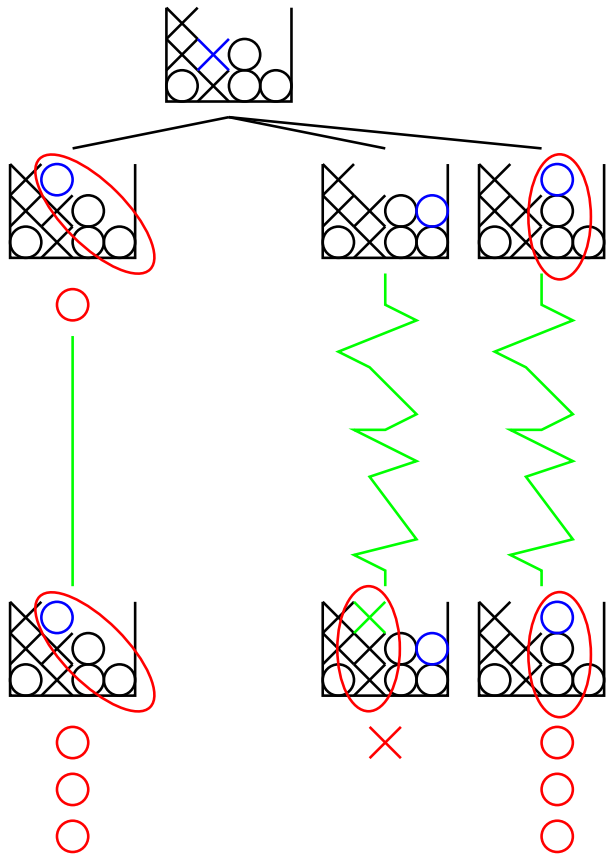
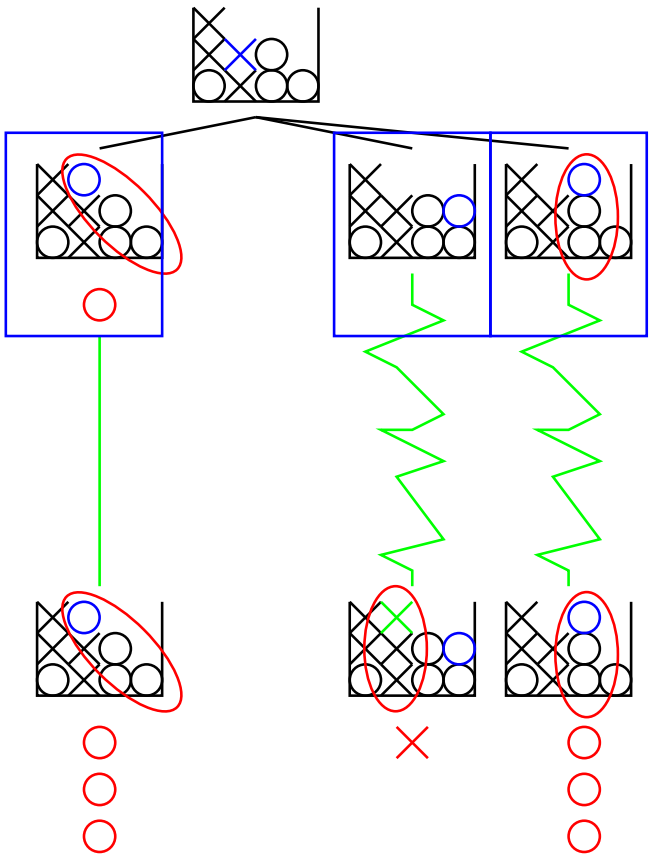
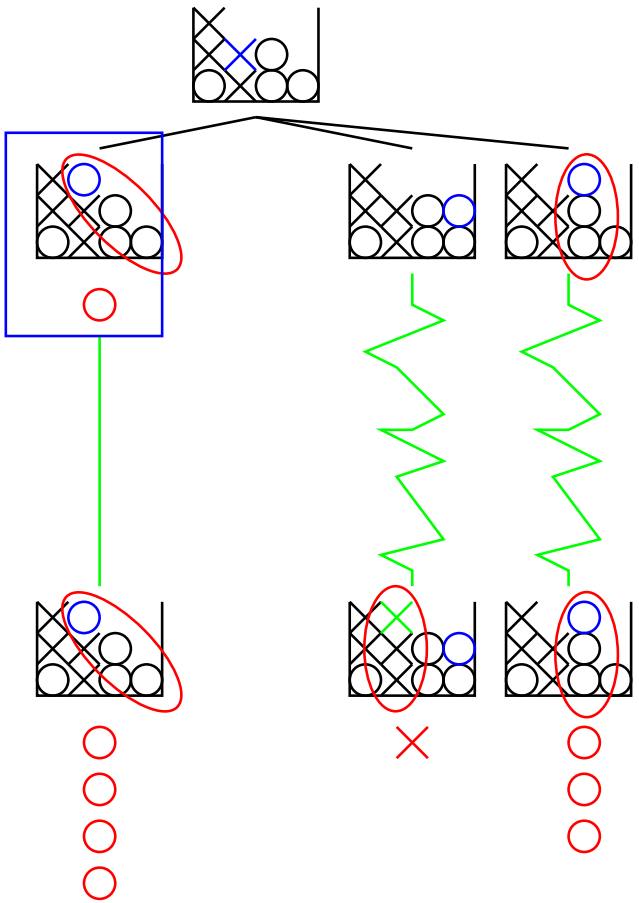


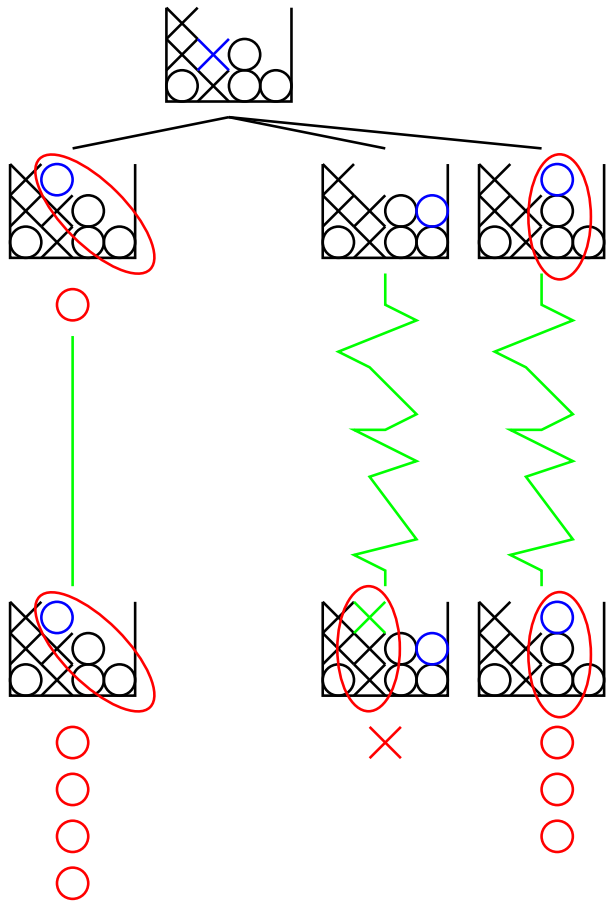
5. iteráció



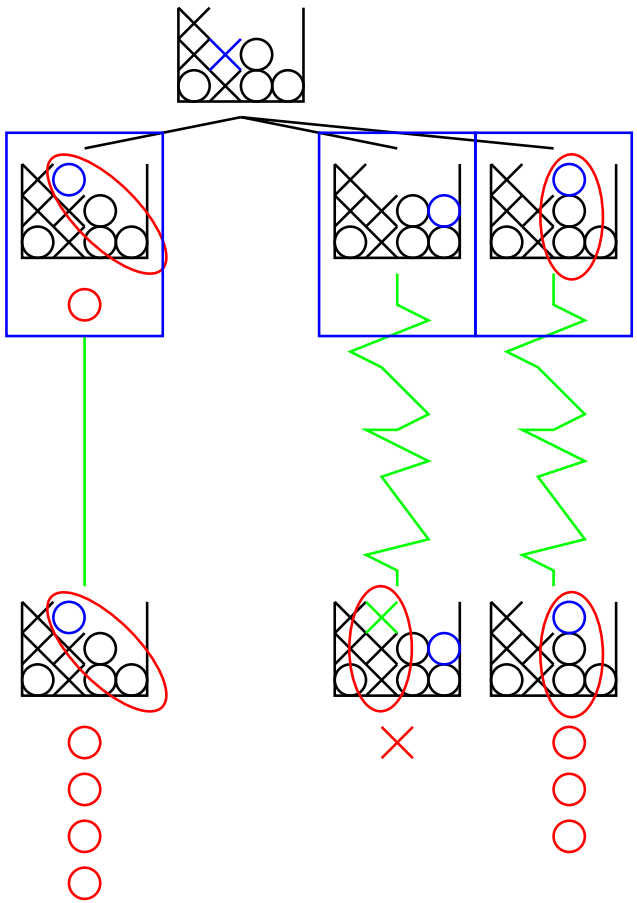
5. iteráció



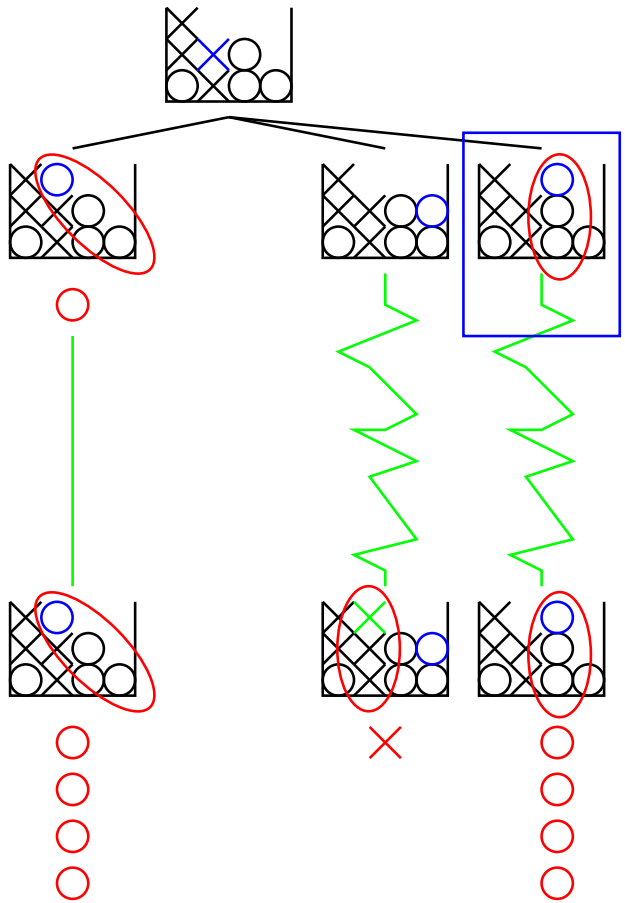
5. iteráció



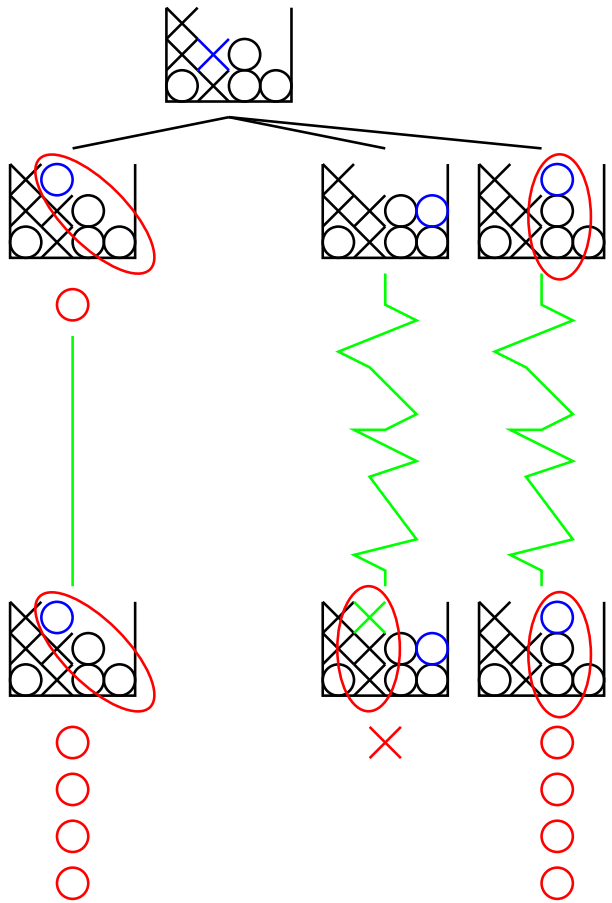
6. iteráció



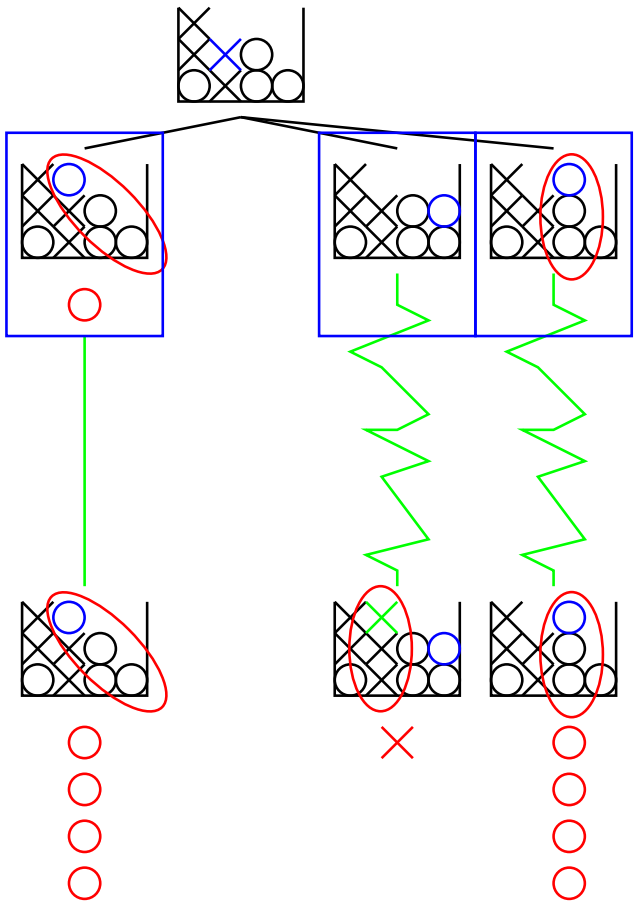
6. iteráció



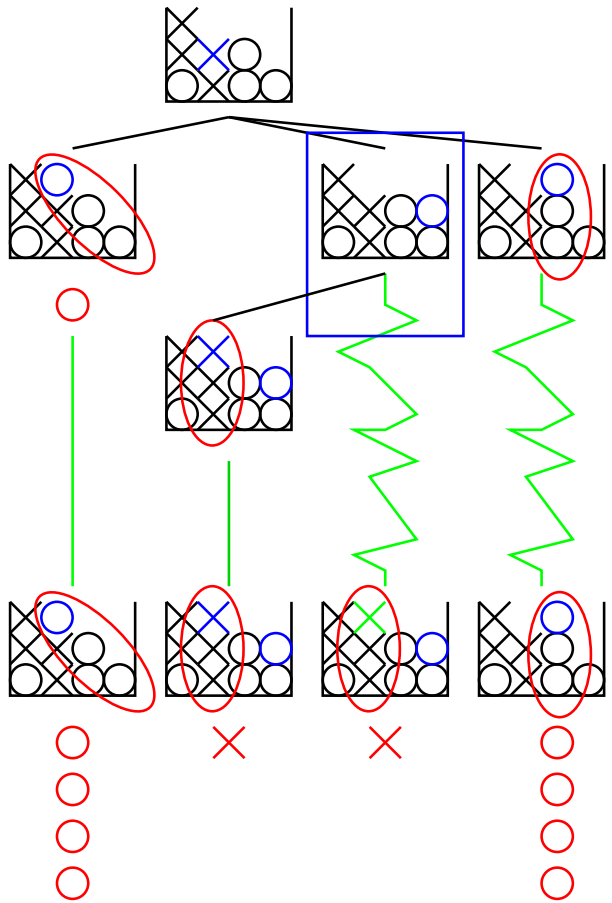
6. iteráció



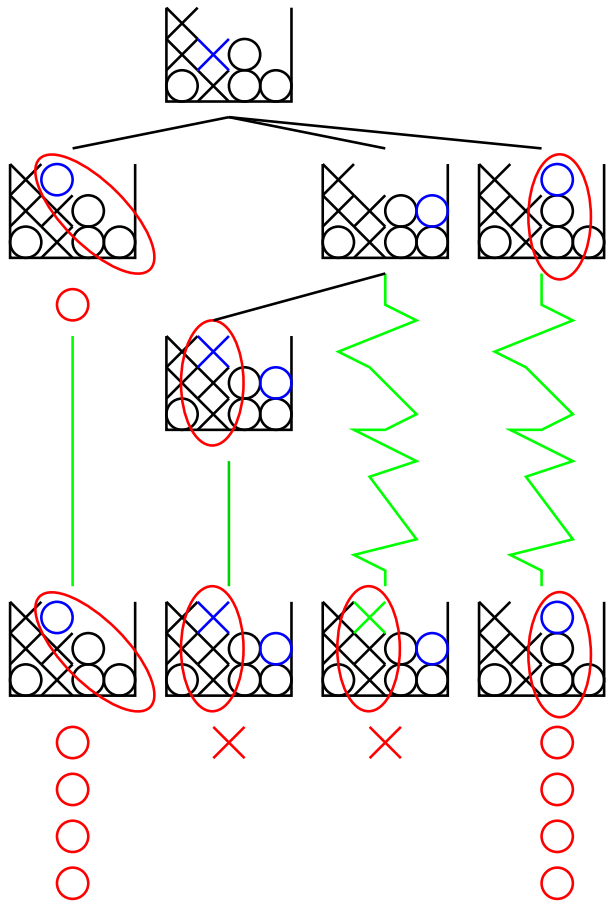
7. iteráció



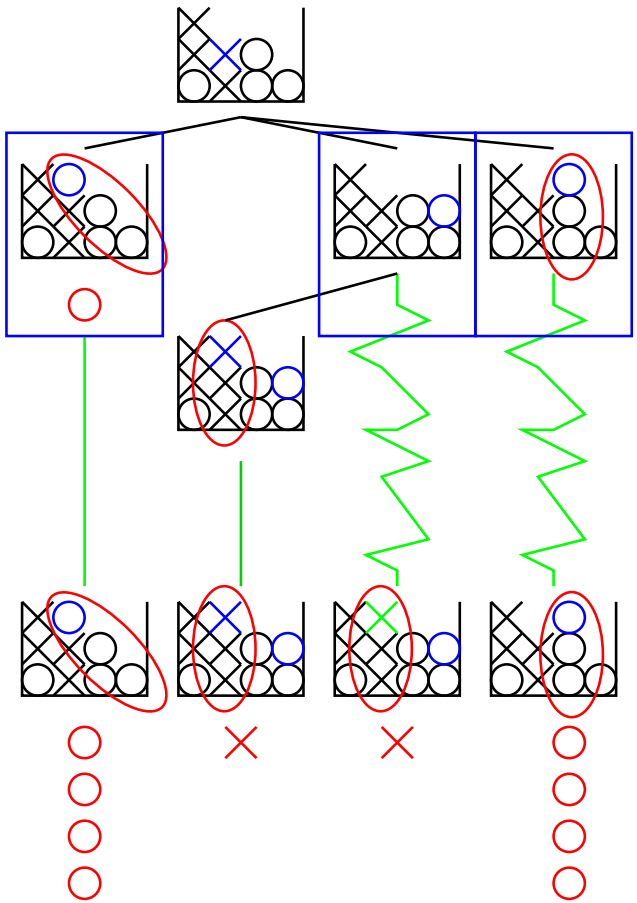
7. iteráció



7. iteráció



És a döntés



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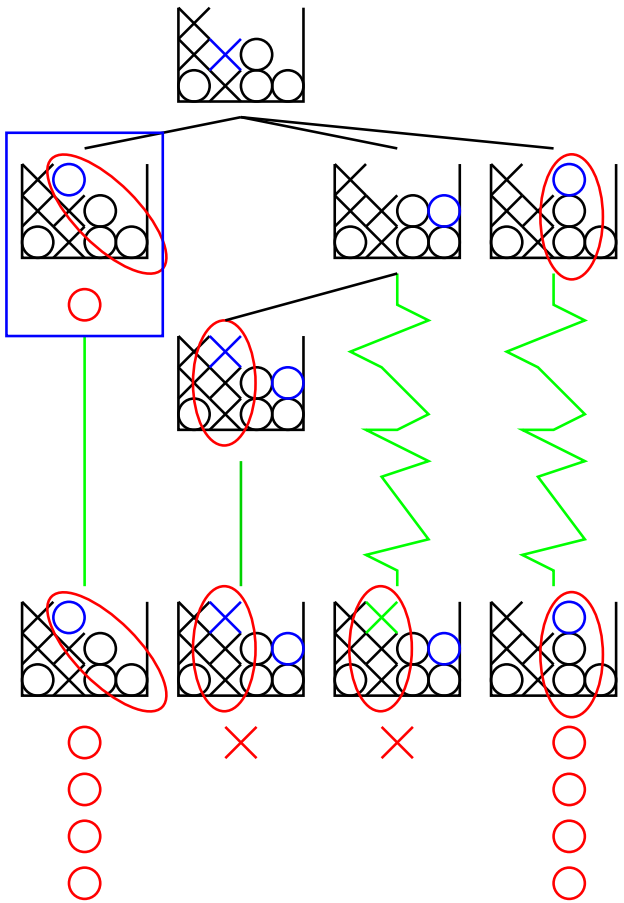

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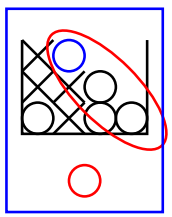

A játszma végeredménye

Kör nyert.