

Collatz sequence

22, 11, 34, 17, 62, 26, 13, 40, 20, 10, 5, 16, 8, 4, 2, 1

2.

Figur it out pg: 72

2.
$$\begin{array}{r} 4210 \\ - 0124 \\ \hline 4086 \end{array} \rightarrow \begin{array}{r} 8640 \\ - 0468 \\ \hline 8172 \end{array} \rightarrow \begin{array}{r} 8721 \\ - 1278 \\ \hline 7443 \end{array} \rightarrow \begin{array}{r} 7443 \\ - 3447 \\ \hline 3996 \end{array} \rightarrow \begin{array}{r} 9963 \\ - 3699 \\ \hline 6264 \end{array} \rightarrow \begin{array}{r} 6642 \\ - 2466 \\ \hline 4176 \end{array}$$

$$\begin{array}{r} 7641 \\ - 1467 \\ \hline 6174 \end{array}$$

if takes 7 rounds