Clover is a hash algorithm that's based on rhodonea curves. The algorithm supports outputs of varying sizes.

A description of the algorithm follows.

Let **B, H**, and **R** be arrays of **N** bytes, where $32 \leq \mathbf{N} \leq 128$. Let **a** and **p** be arrays of **N** / 8 64-bit unsigned integers.

1. Convert **B** into a set of 64-bit unsigned integers. Let **a** represent the integer set.
2. For **h** in (13, 26, 39, ..., 75):
    1. For **i** in (0, 1, ..., **N** / 8):
        1. Set **b** to $\mathbf{a}_i$ / (max(64-bit unsigned integer)) * **h** * π.
        2. Set $\mathbf{x}_0$ to max(64-bit unsigned integer) * cos(**b** * **h**) * cos(**b**) / 2.
        3. Set $\mathbf{y}_0$ to max(64-bit unsigned integer) * cos(**b** * **h**) * sin(**b**) / 2.
        4. Set **x** to round(ceiling($\mathbf{x}_0$)).
        5. Set **y** to round(ceiling($\mathbf{y}_0$)).
        6. Set $\mathbf{p}_i$ to **x** ^ **y**.
        7. Set $\mathbf{a}_i$ to $\mathbf{p}_i$.
    2. Let **H** represent the output hash. Compute $\mathbf{H}_i$ as follows ($0 \leq \mathbf{i} < \mathbf{N}$, $0 \leq \mathbf{j} < \mathbf{N} / 8$):
        1. $\mathbf{H}_i = \mathbf{a}_j$.
        2. $\mathbf{H}_i = \mathbf{a}_j << 11$.
        3. $\mathbf{H}_i = \mathbf{a}_j << 13$.
        4. $\mathbf{H}_i = \mathbf{a}_j << 17$.
3. Store **p** into **R**.
4. Recompute **H** as follows:
    1. $\mathbf{H}_i$ ^= $\mathbf{R}_i$.