

Lovelace & Babbage

<https://tekeli.li/rogers-rules/>

Last edited 2025-05-06

Goal

Have the most points at the end of the game.

Note: I have made some changes to what happens in which phase, for convenience.

Setup

Each player selects a character, and takes the Character Subroutine Cards and a score sheet.

Shuffle the cogwheel Engine Component Tokens and place face-down by the board.

Shuffle the Patron Cards and place face-down in a stack.

Place the Timer (which is also Player Order Token 1) and Player Order Tokens 2-n by the board.

Play four rounds.

Round

Subroutine Phase

Choose one of your Subroutine Cards, not already available, that you plan to reach this round. Place it face down on its own.

Choose one or more available Subroutine Cards to be active this round. (Face up, and there may be an immediate benefit.)

Reset Phase

Not in round 1.

Draw four Engine Components, turn them face-up, and fill the highest empty row on the board. (If more than two “Set To” tokens are drawn, shuffle and redraw until there are no more than two.)

Program Phase

Turn up 3 Patron Cards plus one per player.

All players simultaneously use available Operations to fill in the leftmost empty column of their score sheet. You may normally use only 5 operations, though some Subroutine Cards allow more.

- $+ N$ - add or subtract that amount
- $\times N \div$ multiply or divide by that amount (drop remainders)
- \Leftrightarrow exchange first and second digits.
- \rightarrow copy one digit to the other.
- $\Rightarrow N$ set the result to that value.

Operations that result in a number less than 0 or higher than 99 are not allowed.

The first player to finish takes the timer, and turns it over. Other players take the lowest-numbered player order token remaining, and must stop when the timer runs out.

Resolution Phase

In player order as just established, resolve single operations: player 1's first row, player 2's first row, etc.

If your result matches your face-down Subroutine Card, you may turn it face-up and make it available. Also tick the leftmost empty box in the "pair of cards" block on the score sheet. If your operation used a cog from rows C, D or E, tick the leftmost empty box in the C, D or E block as appropriate.

If your result matches a Patron Card, you may choose which symbol to score. You may score only one of each symbol in a single round; tick the box in the column corresponding to the round number. Turn the card sideways, with the symbol you scored at the bottom. If the card is already sideways, score the symbol at the top if you can, and turn the card top-down. If the card is already top-down or if you cannot score any available symbols, you may tick a Σ box. If you scored a symbol and your operation used a cog from rows C, D or E, tick the leftmost empty box in the C, D or E block as appropriate.

If you generate an illegal value and wish to re-plan your operations, tick one of

the two empty Debug boxes and re-plan from that point, limited by the timer.

Once all operations are resolved:

Copy the final value from your column to the top of the next column.

Return timer and turn order tokens to the centre.

Discard patron cards.

Remove any active subroutines from the game.

If you completed a subroutine, add it to your available cards.

Scoring

Add points:

For each symbol, the player with the most gets 9 points for the top-hat box, and the player with the second-most gets 4. Ties split the points: 1 and 2 equal get $(9+4)/2=6$ points each.

Each Σ is worth 1 point.

Each subroutine (pair-of-cards) you activated is worth points as shown.

Each C/D/E operation used to complete a goal is worth points as shown.

Each debug box ticked is worth -3.

Break point ties on highest number of (subroutines + component bonuses); lowest number of Σ ; first in turn order in the final round; player who most recently updated a computer program.