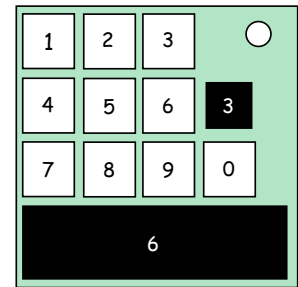


On the Subject of Forget Me Now

No, this is not a boss module. Stop being judgemental.

- This module has two screens, a main display on the bottom, and a stage counter on the right, and ten buttons numbered 0-9.
- To activate the module, press any of the numbered buttons.
- The number of stages the module has is equal to the number of modules on the bomb. When the module has activated, it will display a number for all the stages one by one until all the stages have been shown.
- For each stage, add the displayed number and the added number received from Table 1, and take the least significant digit. This is the calculated number for that stage.
- After all the stages have been shown, press the calculated numbers on the numbered buttons in the order they were obtained.
- If an incorrect number is pressed for a stage, the module will strike and the displayed number for that stage will be shown with a light next to the corresponding numbered button. The stage display will also show the current stage number until the next correct input.



Let $u[n]$ be the calculated numbers for each stage, let $v[n]$ be the added numbers for each stage, and let n be the stage number. Let $u[-1]$ be the last digit of the serial number, and $u[0]$ be the number on the button pressed to activate the module.

Table 1:

For each stage:

- If either $u[n-2]$ or $u[n-1]$ are 0, $v[n] = \text{ceil}(h(n) * \text{first digit of serial number} / 5)$
- Otherwise, if $u[n-2]$ and $u[n-1]$ are both even, $v[n] = \text{abs}(g(n) * 4 - \text{total stages})$
- Otherwise, $v[n] = u[n-2] + u[n-1] + \text{digital root of } (f(n) * 2n^2)$

The function $\text{ceil}()$ means to round the result up to the nearest integer. The function $\text{abs}()$ means to take the absolute value of the result (remove negative signs).

Table 2:

Use this graph to find the values of $f(x)$, $g(x)$, and $h(x)$. Substitute n for x . Any value where $x > 20$ is treated as $x = 20$.

