# 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 <u>displayed number</u> and the <u>added number</u> received from <u>Table 1</u>, and take the least significant digit. This is the <u>calculated number</u> for that stage.

- After all the stages have been shown, press the <u>calculated numbers</u> 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 <u>displayed number</u> 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.
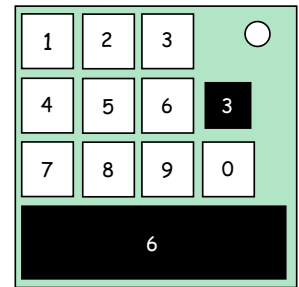
Let u[n] be the underlined calculated numbers for each stage, let v[n] be the added numbers for each stage, and let n be the stage number. Let u[-1] be the last digit of the serial number, and u[0] be the number on the button pressed to activate the module.

Table 1:

For each stage:

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

Table 2:

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