## Caesar Cipher II Exploration Questions

You are under pressure to break your enemy's code. You know that the letters have been encoded as numbers using:

$$
\begin{array}{llllll}
A & B & C & D & \cdots & Z \\
0 & 1 & 2 & 3 & \cdots & 25
\end{array}
$$

and that the numbers were then altered using

$$
\text { New }=(A * \text { old }+B) \bmod 26
$$

You have your enemy's coding machine. Your job is to input text and see what comes out in order to break the code, that is guess what numbers the enemy is using for A and B. Good luck!

Think carefully about what to "run through" the machine. There is scratch space below for you to record your attempts. The students with the fewest test messages who guess the A and B correctly win!

## Scratch Space:

