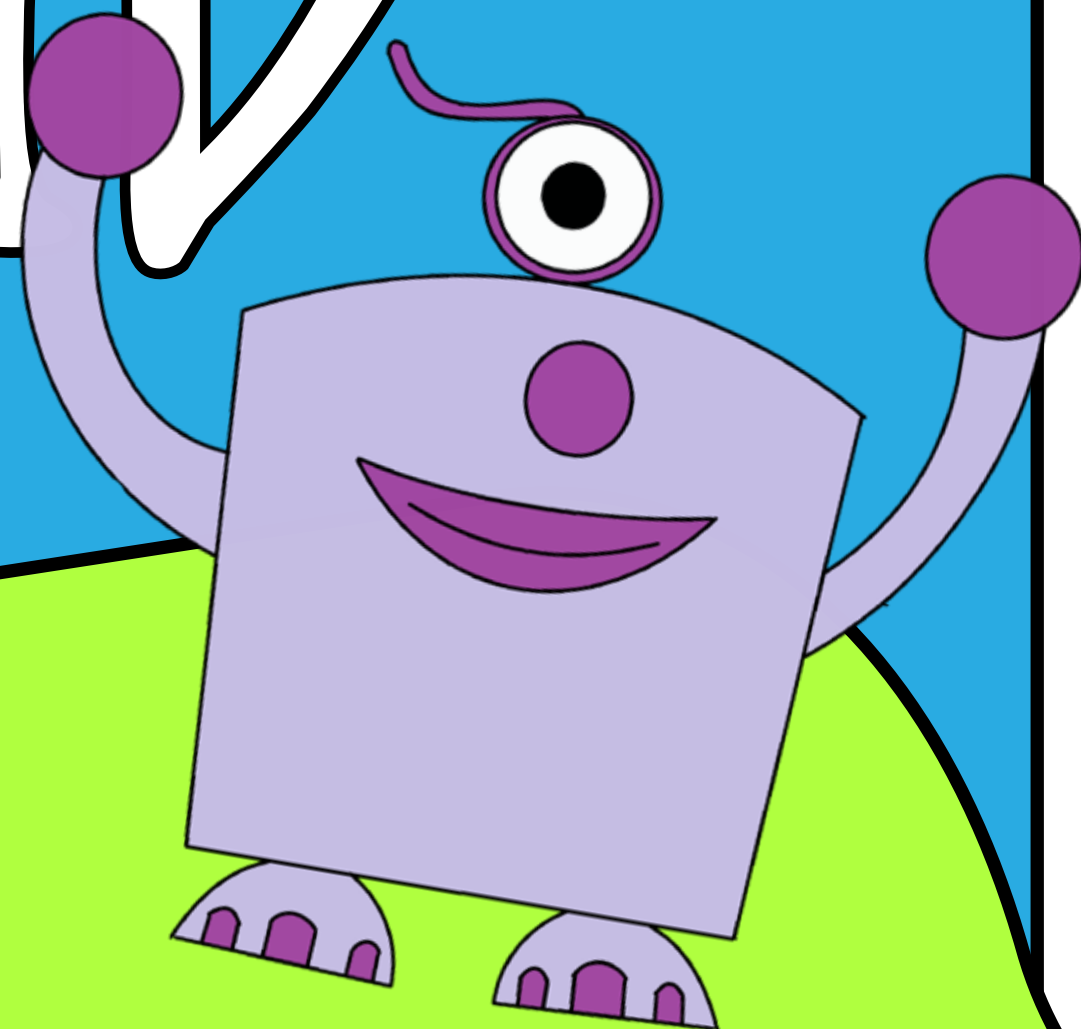


in the Land of

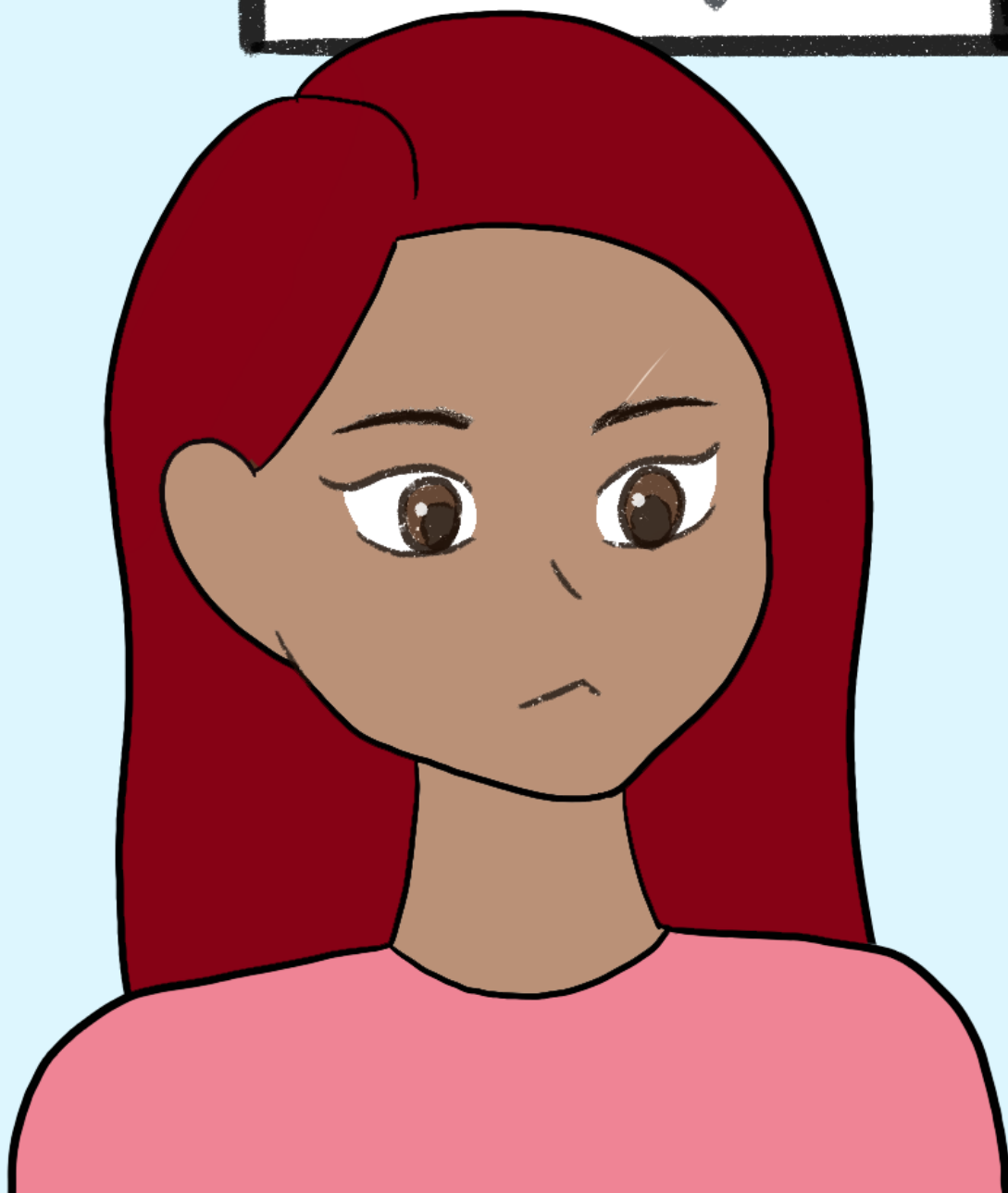
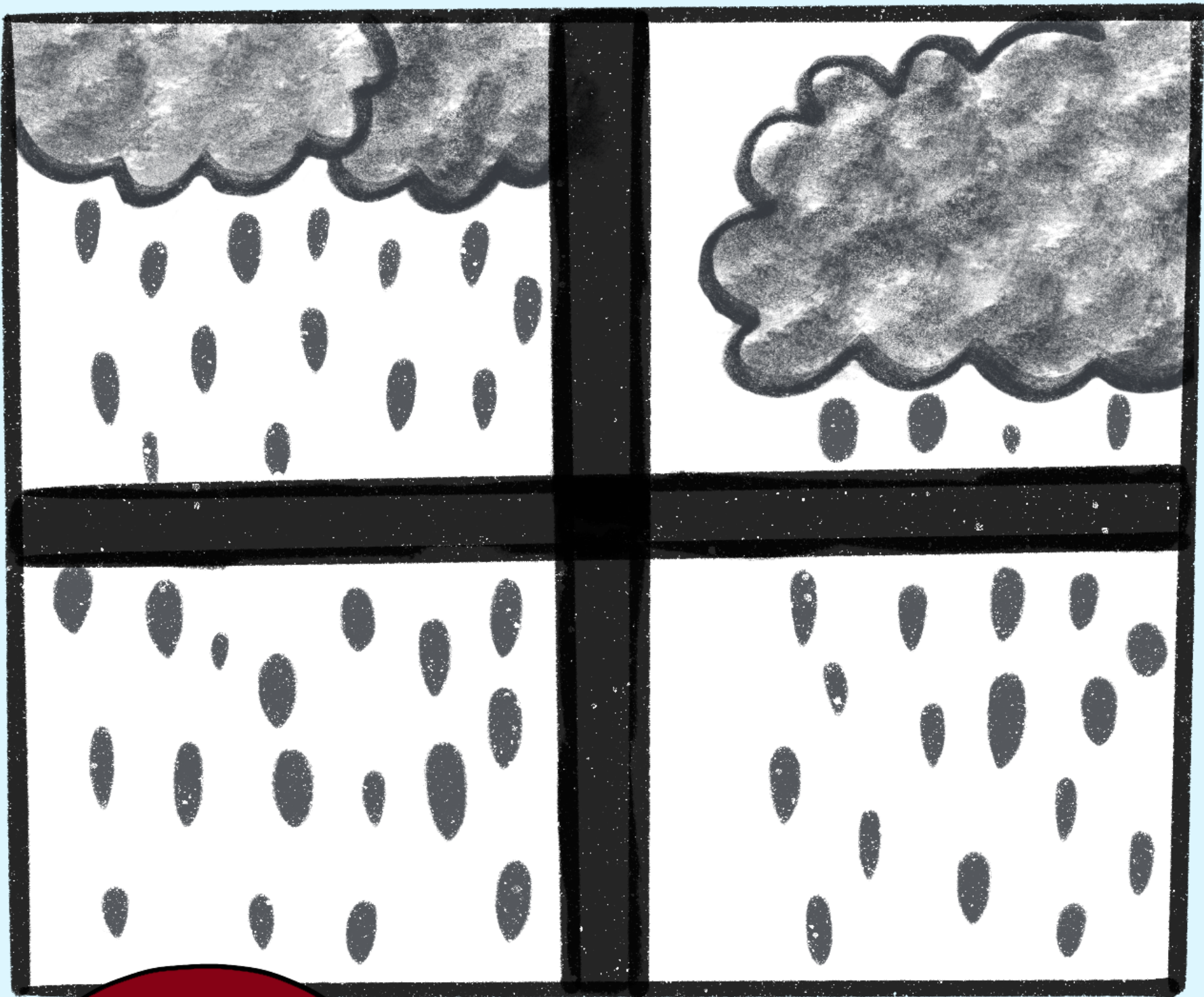
NIAND



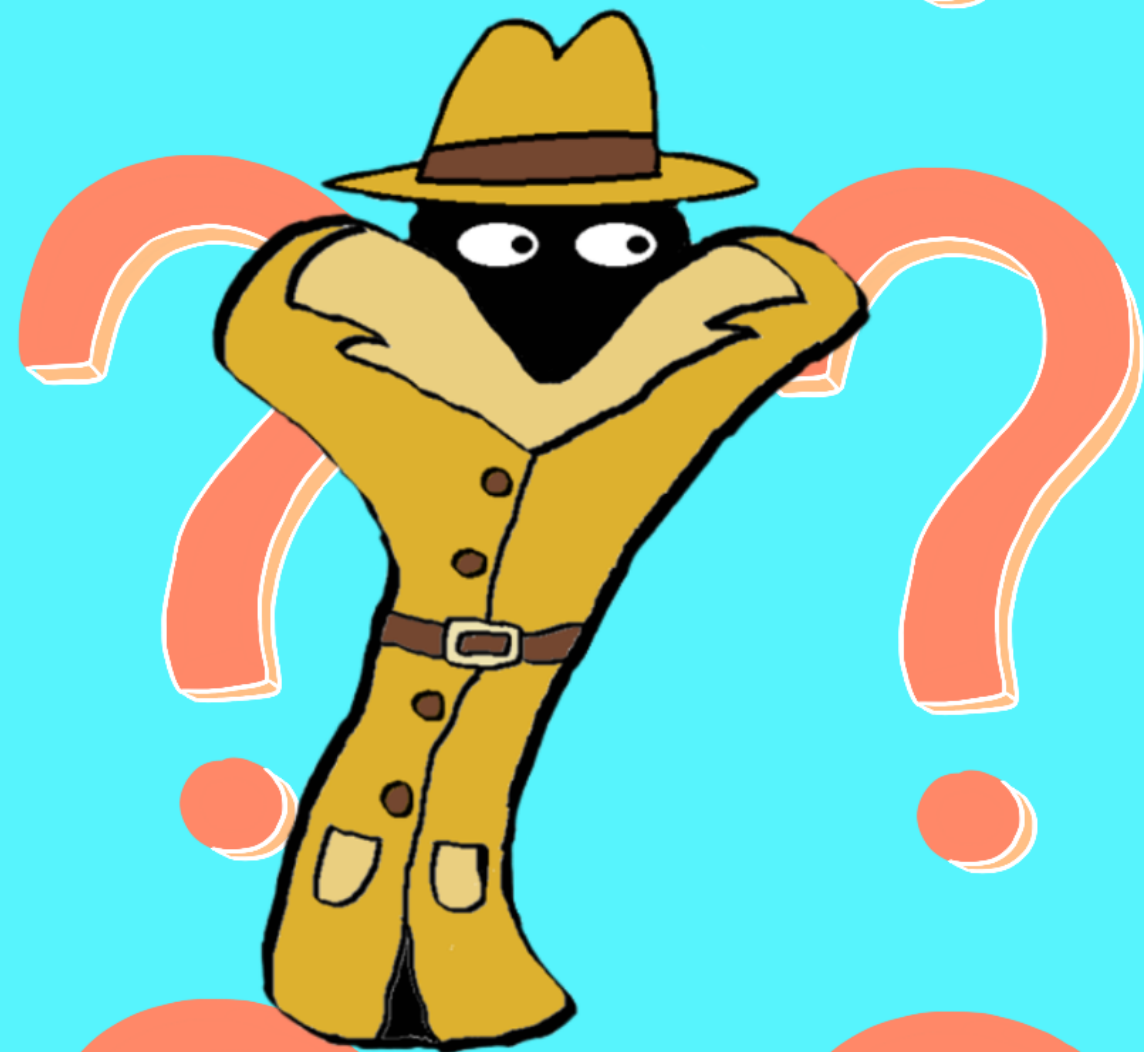
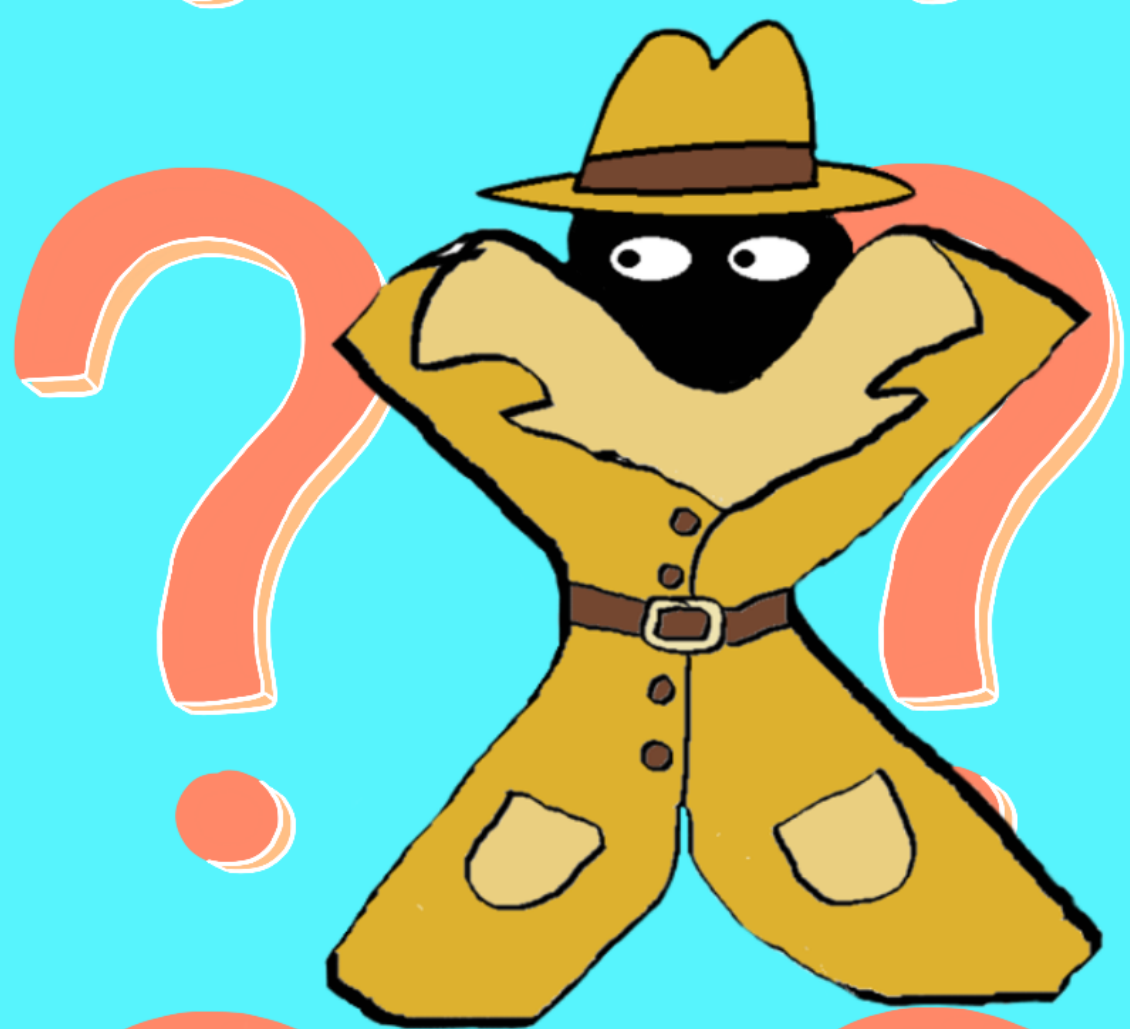
by Emily Franklin

Illustrated by:

Luke Sills, Emily Huo, & Reza Mirzaiee



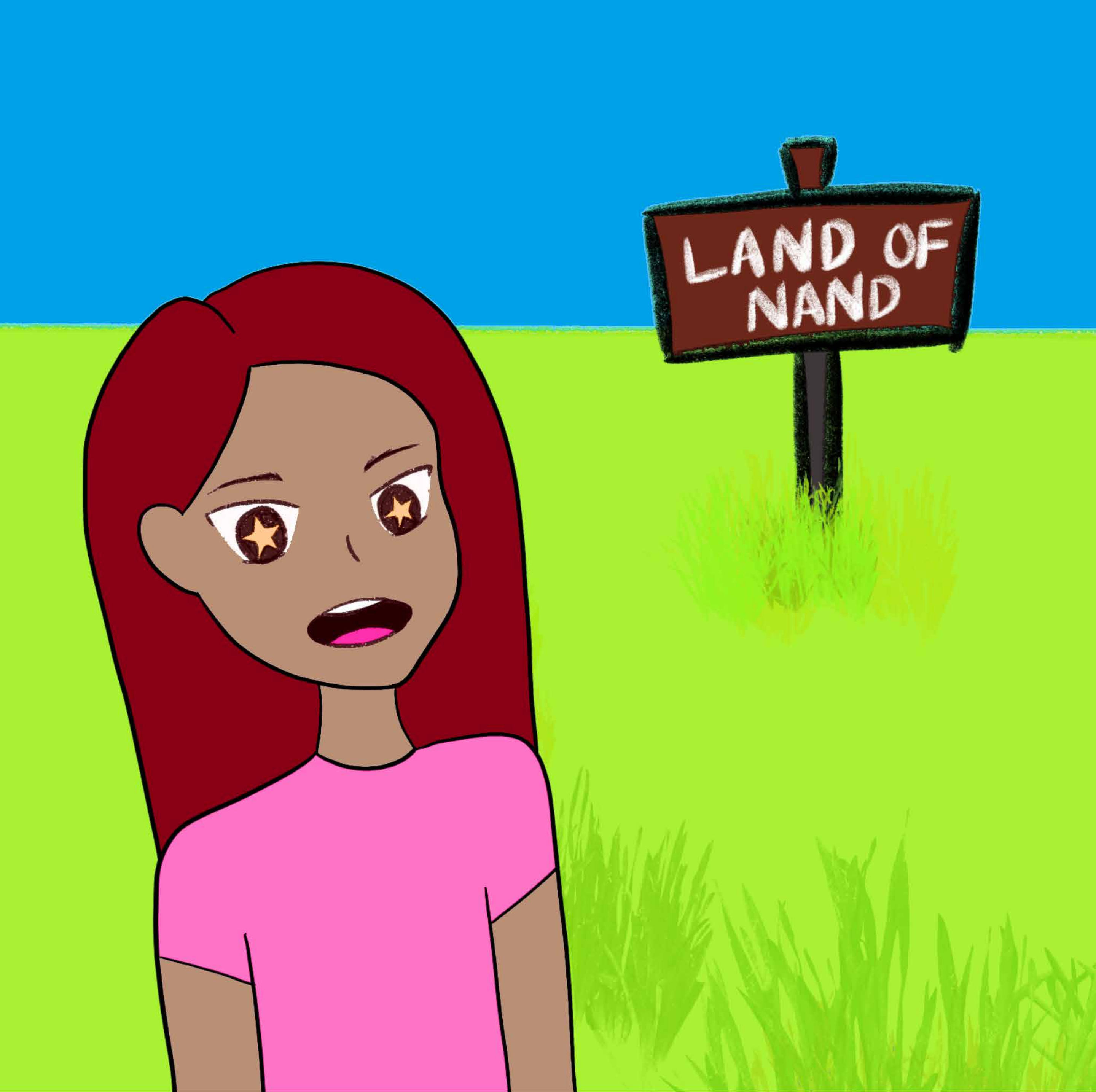
On a rainy afternoon, little Mandy felt blue.
She thought, "How can I show that both things are not True?"



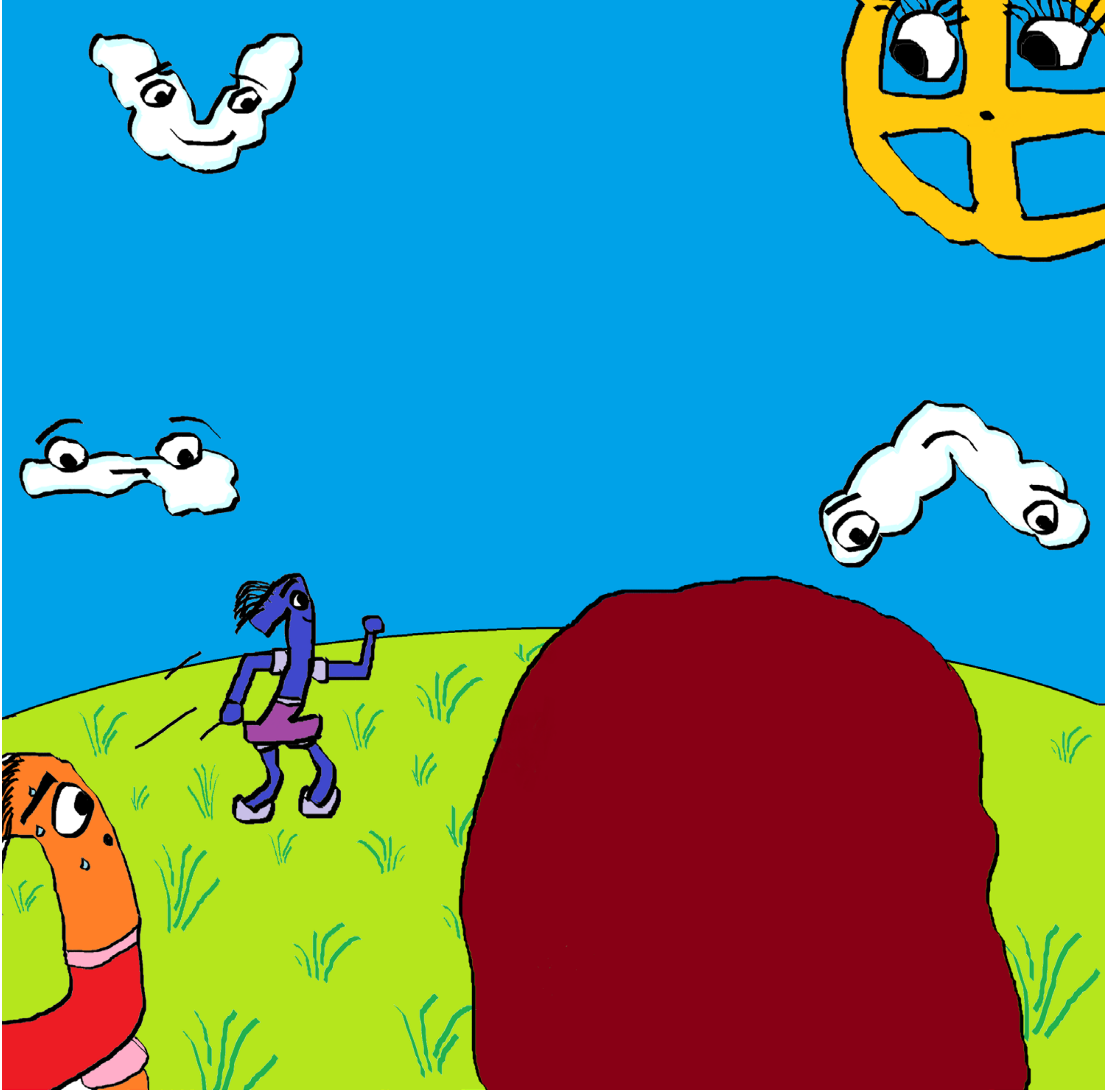
She had two variables, X and Y ,
But couldn't get an output, no matter what she tried.



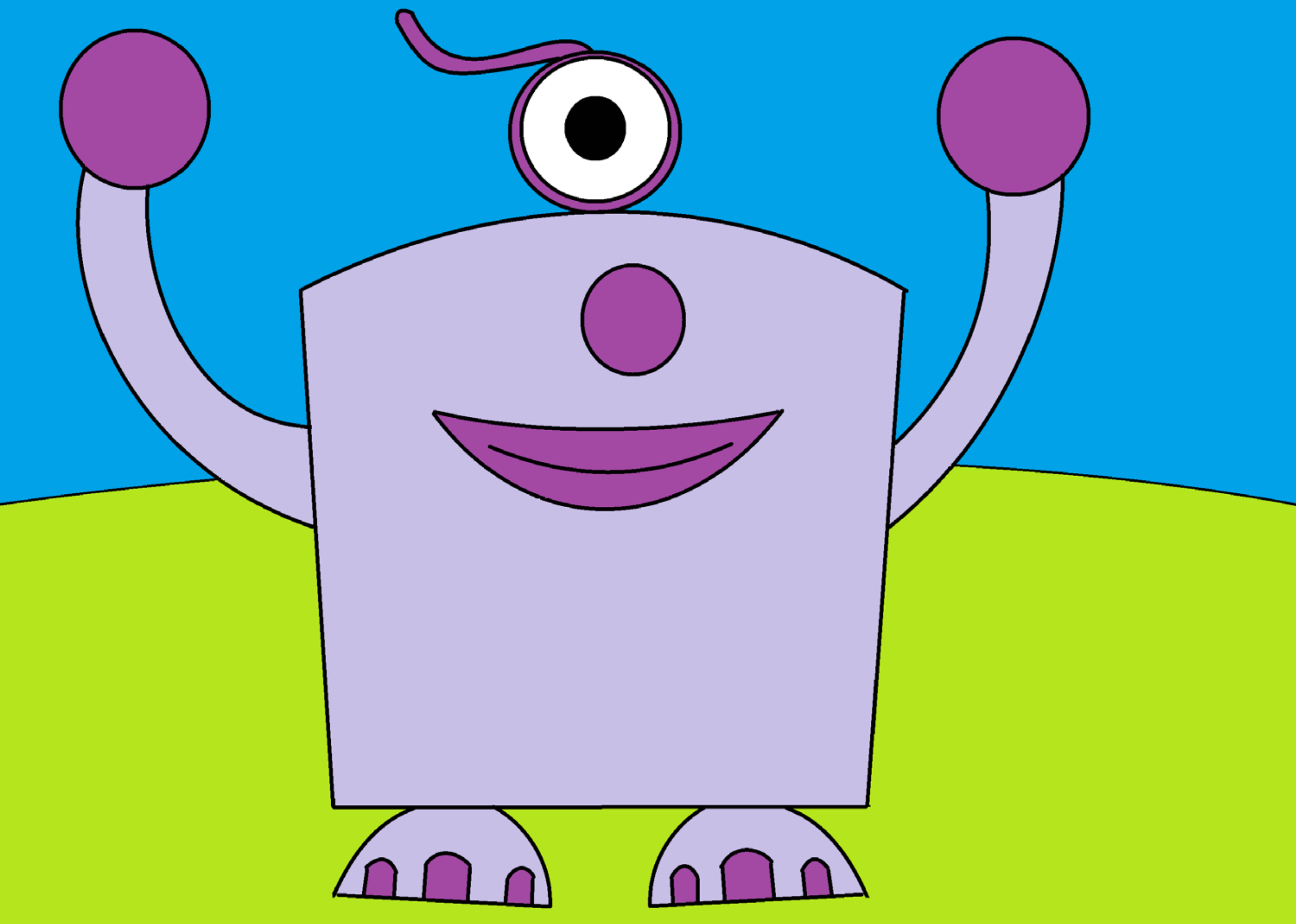
She closed her eyes and sat on the ground, wishing a Theory professor was around.



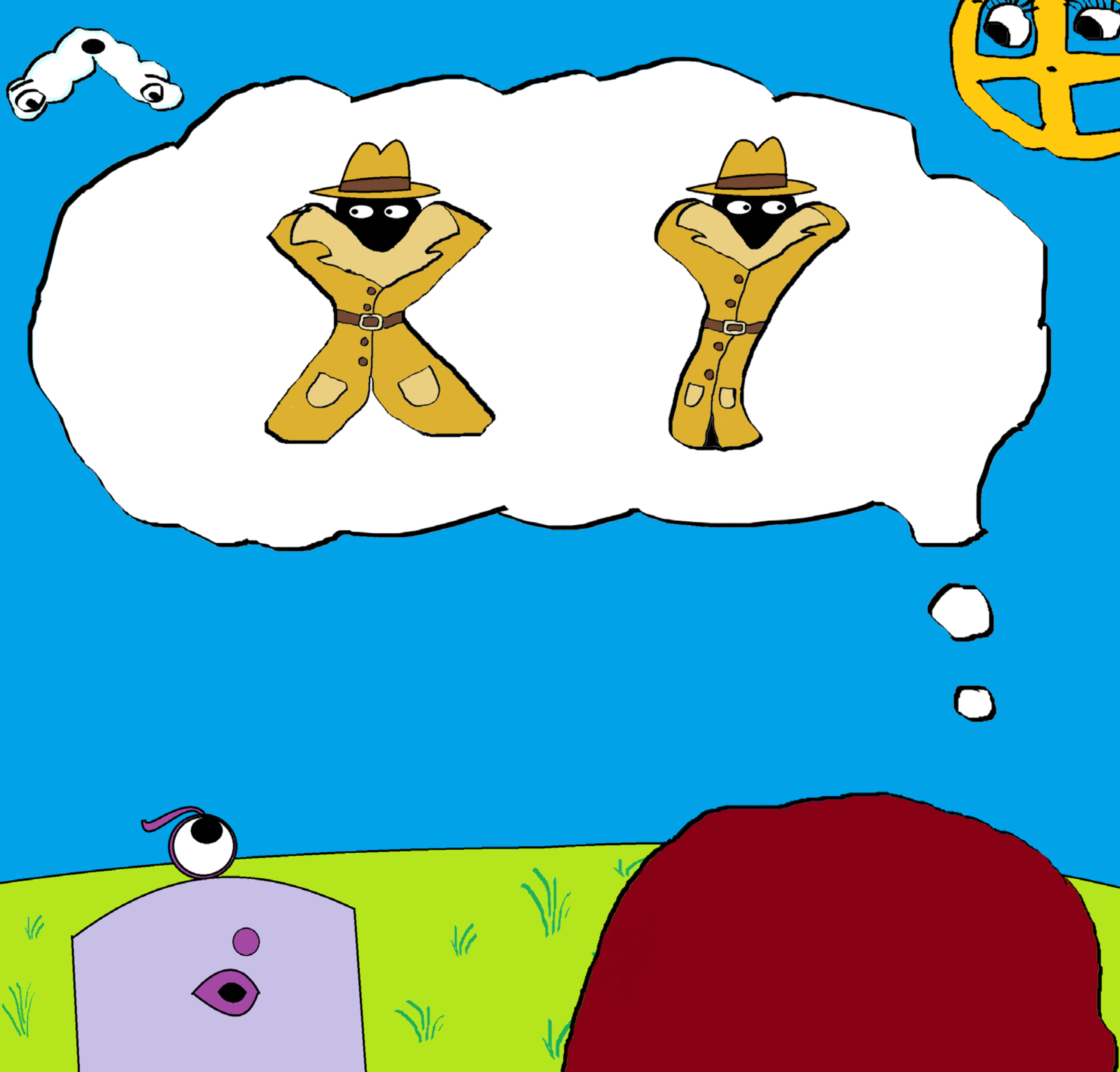
But when she opened her eyes and started to stand, she found herself in the land of the NANDs!



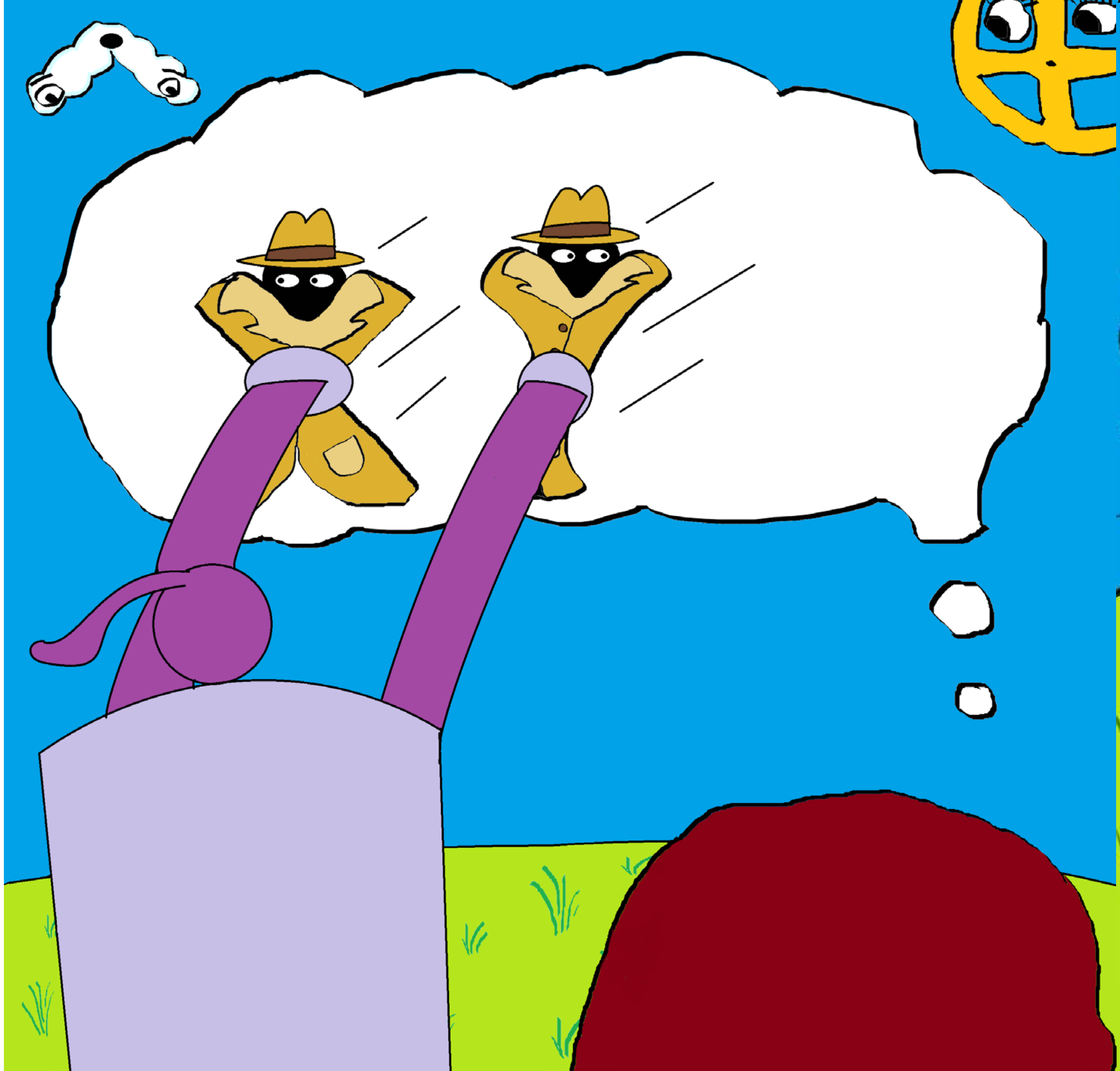
Zeroes and ones sprinted on by,
and Boolean operators floated up in the sky.



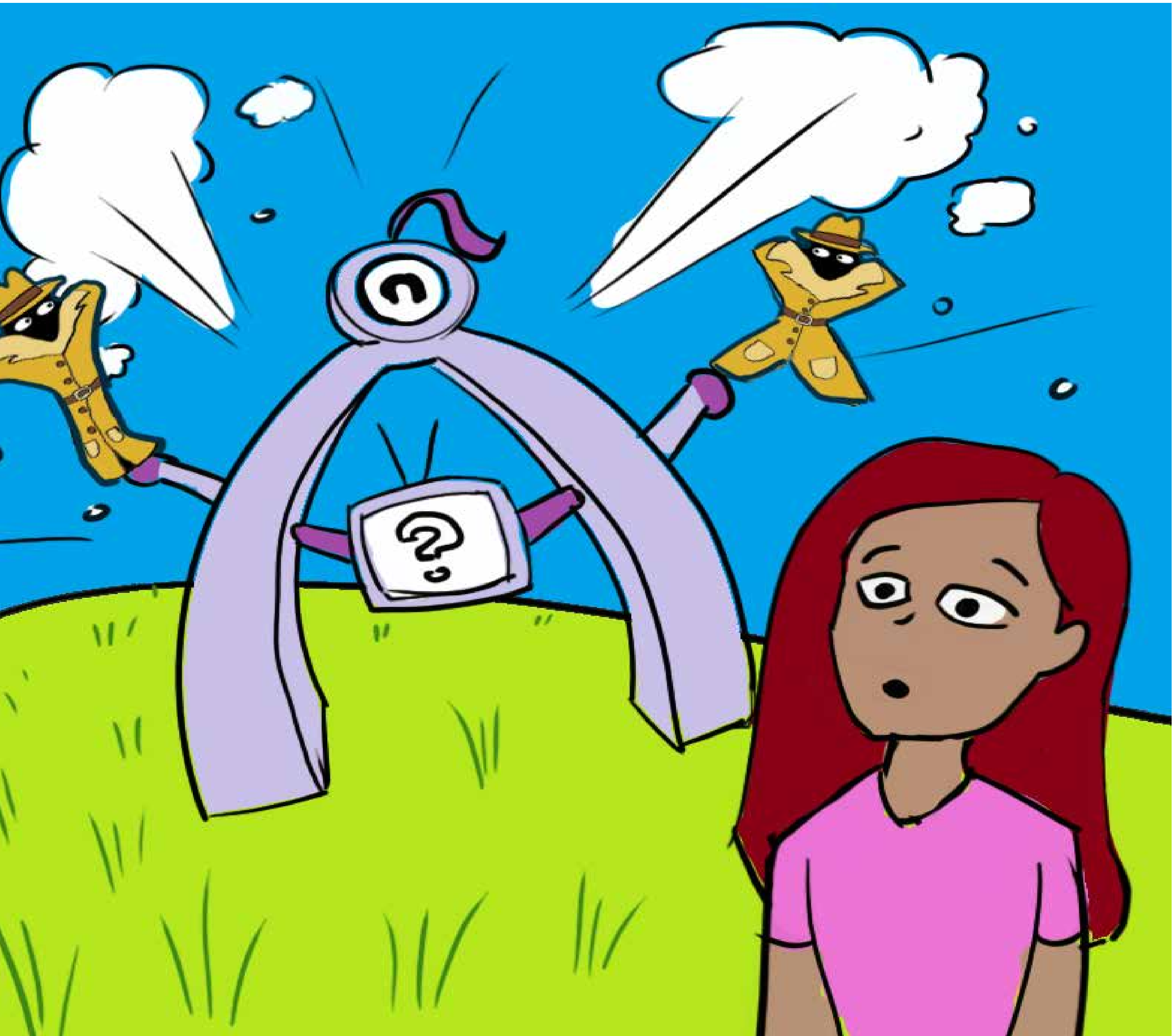
Mandy looked down to the nearest NAND gate, asking, "Hey, could you set something straight?"



“I have two variables – X and Y .
How can I prove at least one of them is False!”, she cried.

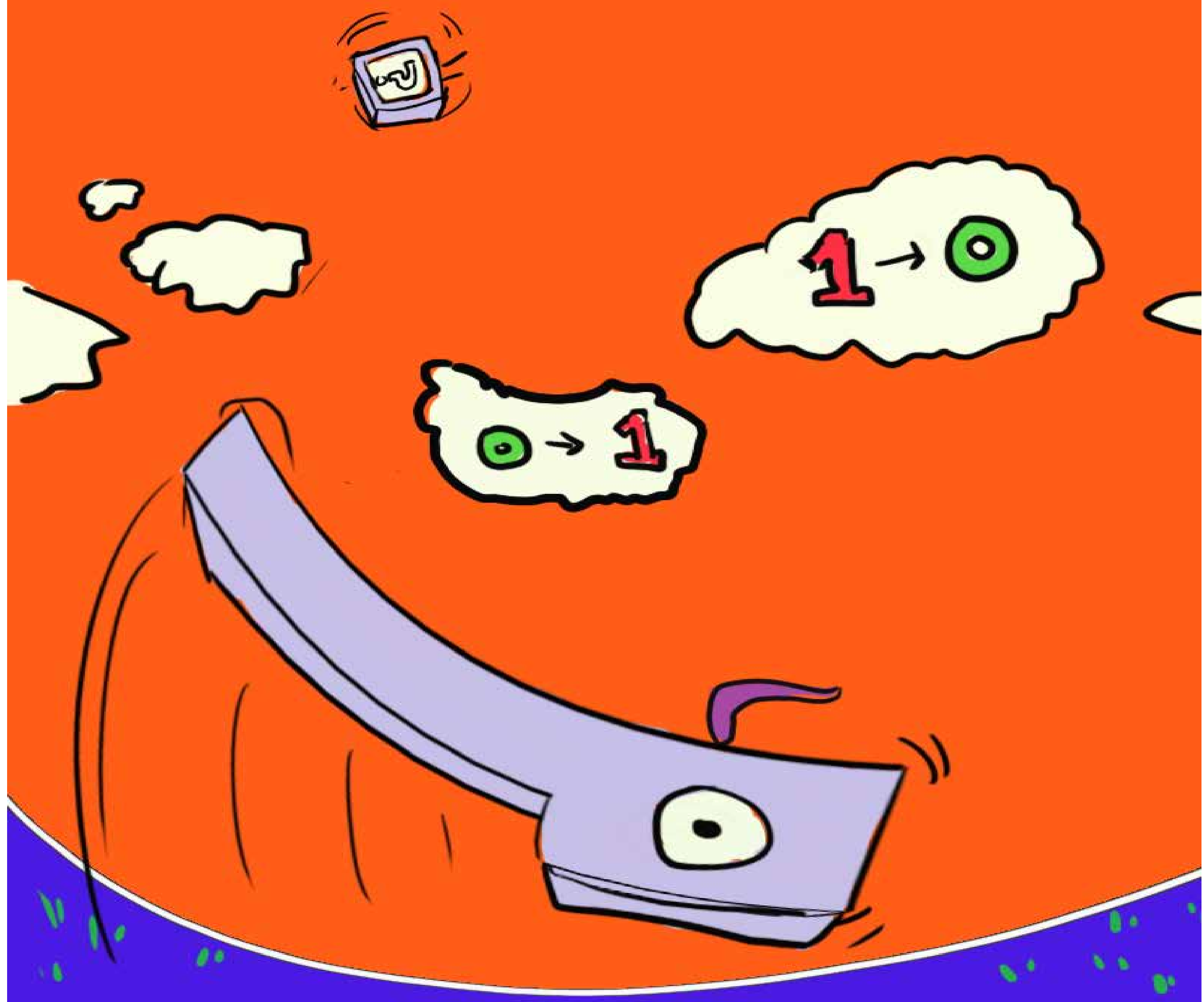


The NAND gate exclaimed, "That's not too difficult!"
"I'll take your two inputs and tell you the result!"



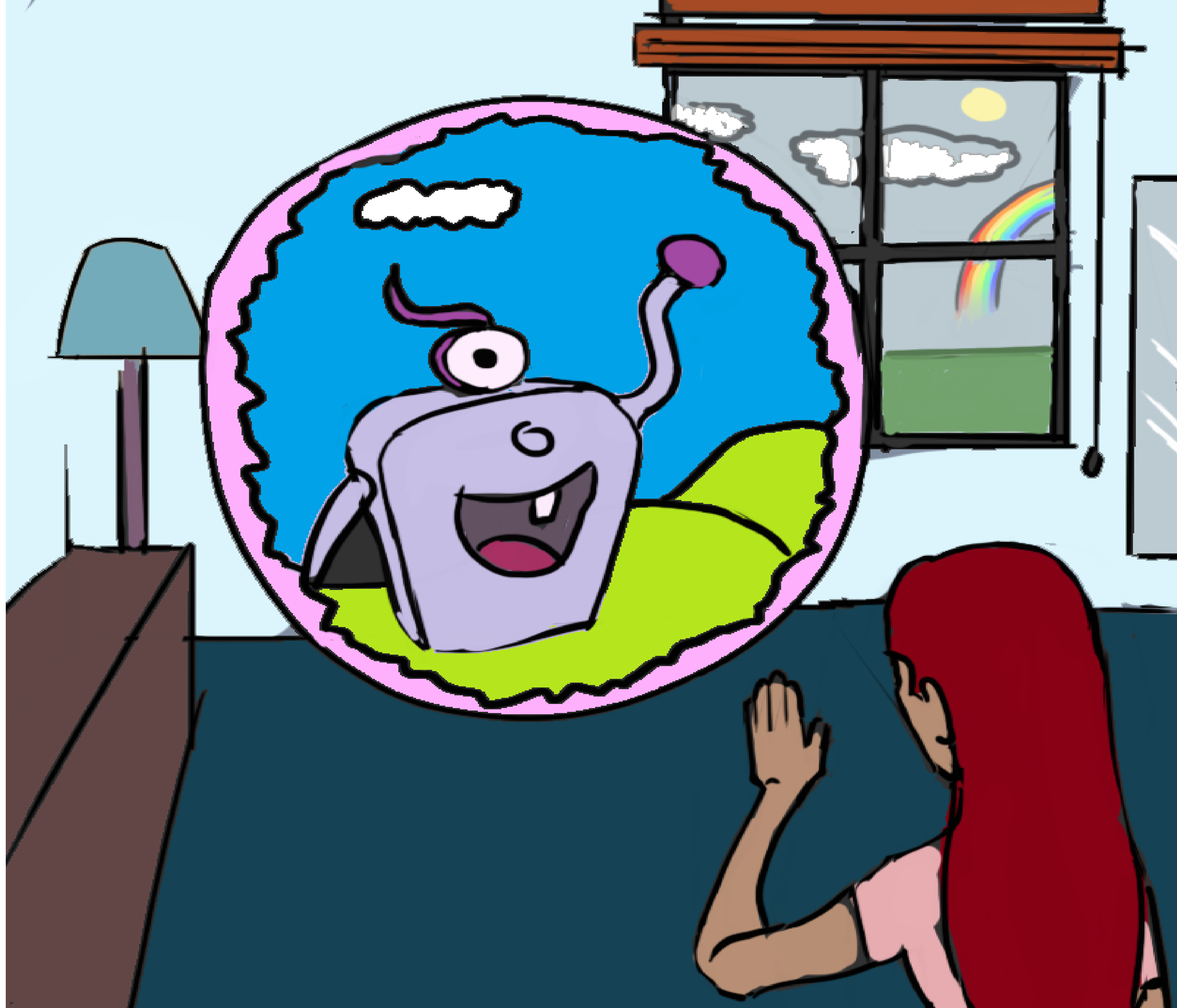
“My process is simple; it’s split in two parts.
I need to become an AND gate to start.”

“I’ll take X and Y – and here’s a clue:
I only return True if both are True too!”



“Next, I’ll become a NOT gate – hooray!
As a NOT gate, it’s always opposite day!”

“I’ll flip the output from the AND gate for you:
True becomes False and False becomes True.”



“And with that, we’ve completed a NAND operation! I hope you’ve enjoyed your Land of the NANDs vacation!”

Mandy found herself back on her living room floor, and thought to herself, “Wait, what’s an XOR?”