

SENSING ACTION WITH FUNCTIONS II

PitchAngle()

This function returns the current pitch angle of the robot in degrees. The pitch angle is the amount of rotation around the **X** axis. Positive angles indicate a rotation upwards, while negative angles indicate a rotation downwards.

MeasureYPos()

This function measures and returns the **Y** coordinate of the closest mosquito to the robot. Remember that the coordinates are in relation to a fixed **X, Y, Z** axis positioned at the base of the robot. Use the coordinate system in the top right corner of the simulation to help orient yourself.

PitchSpeed(speed)

The PitchSpeed() function tells the robot to start rotating its aim around the **X** axis at a specified speed. A positive input rotates the robot upwards, while a negative input rotates the robot downwards (when looking at the horizon). An input of zero stops the rotation.

Math.sqrt(number)

This function will return the square root of the input number.