Student worksheet – How Many Sides? TASK #5

Group Name_____ Group Members_____

Overview: Once on NXTopia, your robot will be required to identify interesting aspects for later analysis. Your robot will be required to mark off an area such that a passing satellite can easily identify the item in question. Initially you will be required to draw a square, but will then move onto other shapes and designs.

Build the drawing attachment and fix it to your robot and program your robot drive in a square, with each side 500mm (20") in length.

How many sides does a square have? _____

How many angles? _____

How many degrees in each angle? _____

Could you use the loop block to make the program simpler?

Fill in the following table for other common shape

Shape	**Number of sides**	**Internal angle**	**External angle**	**Turn Angle required by the robot**
Octagon				
Hexagon				
Triangle				

What was the most difficult part of this challenge? _____

How did you go about solving it? _____