

LEGO Golf Rules

BASIC CONCEPT

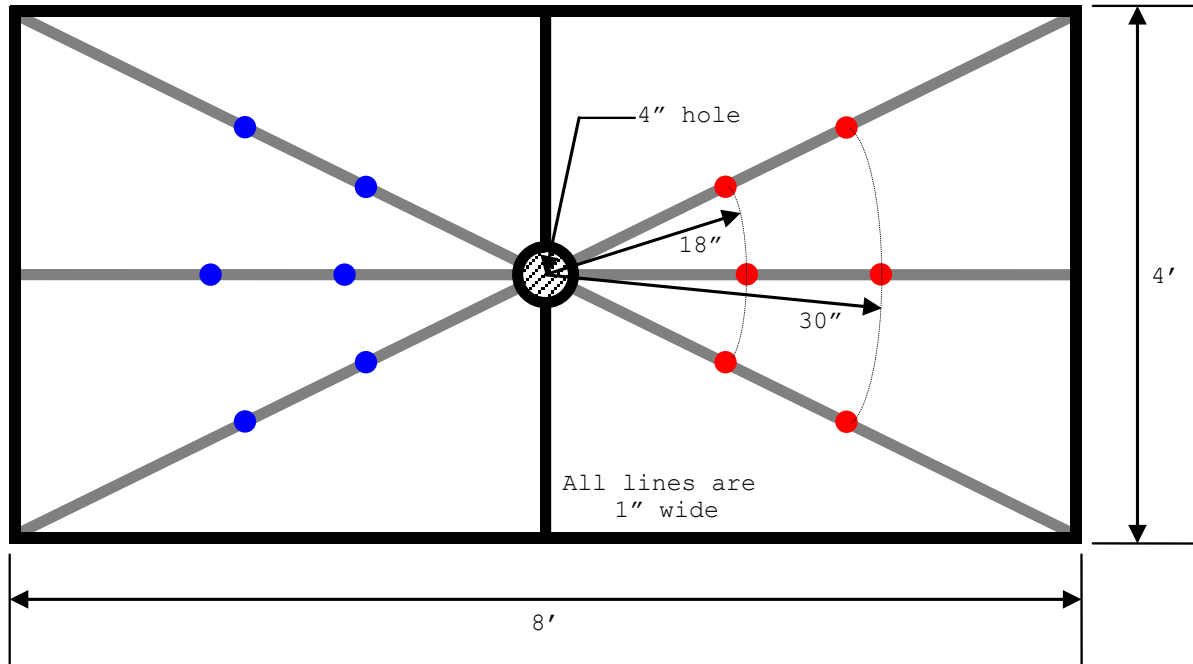
You will design a robot to push small objects into a goal in the middle. For advanced teams, there will be another robot on the playing field at the same time.

PLAYING FIELD

The playing field consists of a 4'×8' sheet of plywood with a 4" hole in the middle with a 2" high wall surrounding the playing field. The field is white and is divided into two halves by a 1" black stripe. The edges of the playing field (including the hole) also have a 1" wide black stripe and 1" gray stripes extend radially from the hole as shown in the diagram below. On each gray stripe a PVC "cup" will be placed at 18 and 30 inches from the center of the hole. The cups will be painted red and blue.

MATERIALS

- The playing surface and the outside wall are made of ½" B-C grade plywood
- The PVC cups are 1" Schedule 40 PVC Caps (Lowe's Item No.23897)
- The white and black are flat latex paint
- The gray paint is Rust-Oleum American Accents 7926 Stone Gray.



GAMEPLAY*

- By the flip of a coin, one robot will be assigned red and the other blue.
- Each robot will be placed on its respective side. It may be placed anywhere on the field, but no part of it may extend into the opponent's side.
- Both robots will be given a start signal from the official. After this time, neither robot may be touched.
- During gameplay, there are no limitations on the movements of the robots.
- After two minutes, the robot will be stopped and removed from the playing field.
- Each team's score will be calculated by awarding three points for every cup pushed through the hole and two points for every opponent cup touching their side.
- In the case of a tie, the winner will be determined by whichever robot was the first to push a cup through the hole.

*Note for non-advanced robots, only one robot will be on the field at a time.

ROBOT LIMITATIONS

- The robots must measure less than 10”×10”×10” throughout the entire game.
- Any parts that fall off of the robot must be removed promptly from the playing field.
- The robots must be totally autonomous.
- The robots may only use one processor and can contain only Lego parts.
- The robots may not intentionally damage the playing field.
- The robots may not block the hole. Any robot covering the hole will be moved by a judge.

SCORING EXAMPLE

Below is an example of a playing field after gameplay. The red team started out on the right. The scoring would be calculated as follows:

	Red Team		Blue Team	
Cups pushed in	4 @ 3 points ea.	12	3 @ 3 points ea.	9
Opponent cups	0 @ 2 points ea.	0	2 @ 2 points ea.	4
Total Points		12		13

