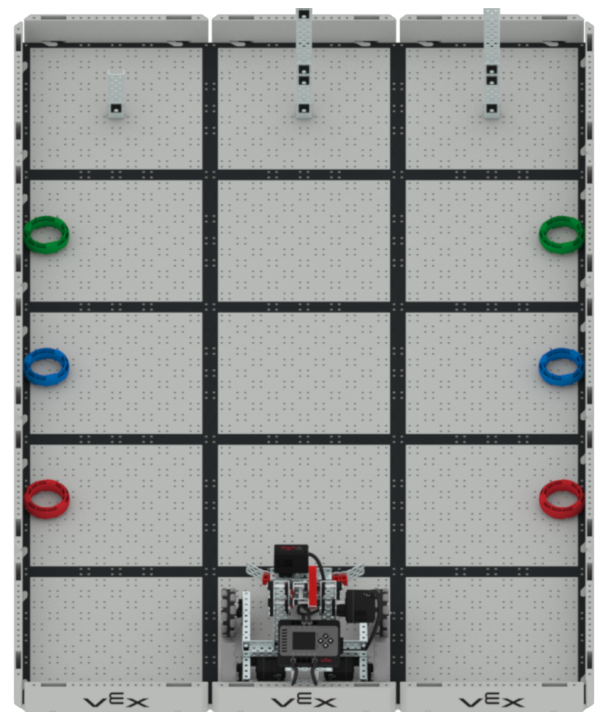# Ring Leader Competition

Score the most points autonomously and using driver control in this two-part competition!

How to Play Ring Leader:

1. **Check your Field and Robot Setup:**

   ○ This activity is completed on a 3' x 5' Field with walls.

   ○ Small, medium and large posts should be attached to the three Tiles on one end of the Field as shown on the right.

   ○ Place six rings on the Field as shown on the right (ring color does not matter).

   ○ Place the Clawbot in the center Tile on the opposite wall of the Field from the large post, as shown on the right.

   ○ The robot must fit inside of a square on the Tiles (approximately 30cm by 30cm, or 12" by 12") at the beginning of the match, but can expand and remain expanded once the match begins.

   ○ Additions to the robot are allowed, including the use of sensors, but all additions must be made using parts of the EXP Kit.

2. **Ring Leader Competition Rules:**

   ○ Ring Leader is played in two 1-minute runs. One run is autonomous, and the other is played using driver control. The Field should be reset between each run.

   ○ The object of the game is to score the most points by grabbing and scoring as many rings as possible in each 1-minute run.

- ○ Rings are scored as follows:

    - ■ A ring on the small post is worth 1 point.

    - ■ A ring on the medium post is worth 3 points.

    - ■ A ring on the large post is worth 5 points.

- ○ The scores of both runs are combined to determine the final score.

- ○ Each run is 1-minute in length. Use a timer to start and stop each run.
    - ■ You can use the {When timer} block in your project to stop your program at 60 seconds (see the Pro-Tip below).

- ○ Rings must be completely around the post to count as 'scored,' as shown in the top image. Rings are not scored if they are hanging from the post.

- ○ If a ring falls out of the Field, hand-place it back in its starting location, without touching the robot. The timer does not stop.

3. **Tie Breaker Rules**:

- ○ If two teams have the same score after both one minute runs, the team with the higher autonomous score, wins.

- ○ If both teams have the same autonomous score, the team who can score two rings on the medium post the fastest during an additional autonomous run, wins.

Pro-Tip

- You can use a {When timer} block in your EXP project to stop your program at 60 seconds, like the example shown here.