



LEGO ROBOTICS DAY CAMP



The Can-Do Challenge

- ❖ The Can-Do playing field is a white area with a black circle or hexagon.
- ❖ Some number of cans are inside the playing field. When we play, we will place the cans inside the circle – try not to depend on the starting placement of the cans.
- ❖ Adapt your ‘bot to push cans.
- ❖ Write a program in Pilot 4 to:
 - Start all or mostly inside the circle.
 - Push as many cans out of the circle as you can in 2 minutes. As long as no part of the can is touching the white inside the circle, it is “out”.
- ❖ Test your program at least 3 times.
 - Does the same thing happen every time? Why or why not?
 - What if you change the starting position of the cans?
 - Why should the program & robot be tested again after they have been shown to work once?
- ❖ What happens if:
 - The playing field is not a circle?
 - The cans are a different size, shape, or weight?
 - The robot is different? How could we easily test this?