Misc:

1. The number of ramps will be at most three. The minimum number of ramps is 0. A ramp will be parallel to the wall closest to the ramp. The distance from the center of the ramp to the nearest wall will be accurate to within 6”.
2. The location given for the ramp is the center of the ramp. The ramps are given in the order in which they should be traversed.
3. The first vector given for a ramp is the direction from which to enter the ramp and the second vector given for a ramp is the direction in which to exit the ramp. The vectors will be unit vectors (e.g., (1,0)) and will only indicate a direction.
4. The number of corners will be at most 50.
5. All coordinates are in units of 6”. For example, a coordinate value of 5 means 30”. A coordinate value of 10 means 60”. Coordinates will be integers between -127 and 127, inclusive.
6. We will give you the input files (e.g., on a USB key or online) to be used in a demonstration when it is time for your team to demonstrate.
7. The corners are given in counter-clockwise order.
8. The corners form a closed polygon.
9. We will not indicate positions of small features such as doorways (but you may assume that the door is closed).
10. All angles are 90 degrees.
11. Locations given on the map may be imperfect – you should not assume that the accuracy of any corner is any better than 6” on any coordinate relative to either of its two neighbor coordinates on the polygon.
12. You should not assume that every side of the polygon will be a wall such as those in the hallway of the CEL. We may use the colored blocks to close off portions of the polygon. We may use something other than the hallway of the CEL for demonstrations.
13. The target location will be accurate to within 1” (both coordinates) of the corner closest to it.

File Format:

<Number of Corners: N>

<Corner 1: X Y>

<Corner 2: X Y>

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<Corner N: X Y>

<Number of Ramps: R>

<Ramp 1 Center: X Y>

<Ramp 1 Entry Vector: X Y>

<Ramp 1 Exit Vector: X Y>

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<Ramp R Center: X Y>

<Ramp R Entry Vector: X Y>

<Ramp R Exit Vector: X Y>

<Target Location: X Y>

Example input file that corresponds to the map drawn on the next page:

6

20 18

-10 18

-10 0

0 0

0 -16

20 -16

2

0 12

1 0

1 0

10 -2

0 1

-1 0

18 16

