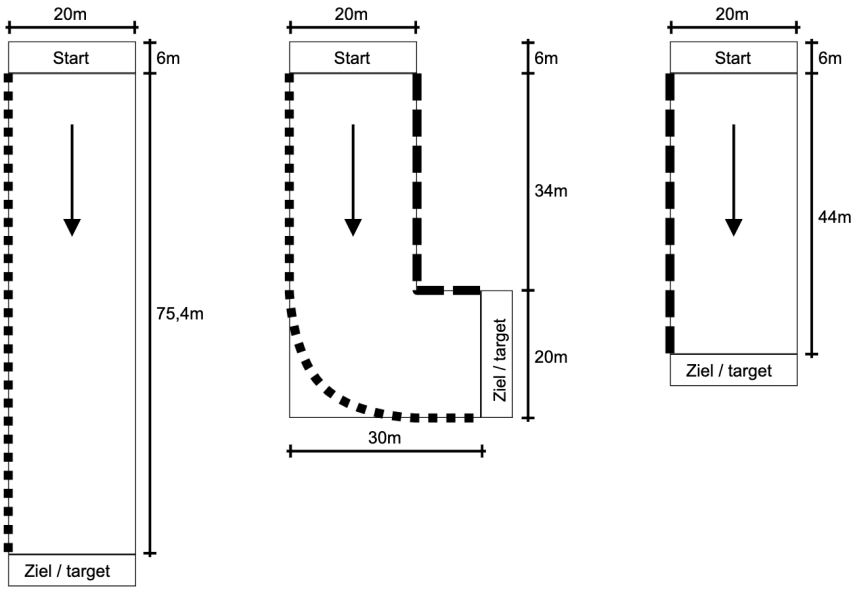
Assignement 6:

The purpose of this assignment is to explore how the movement of people around corners influences evacuation time calculations.

- **Create Three Geometries:** As depicted in the provided image, design three different layouts.
- **Population:** Place 500 individuals in the starting area (labeled "Start"). Ensure that the same group is used across all three layouts to maintain consistent initial conditions. Their goal is to reach the "target" area.



Comparative Analysis:

By timing how long it takes for everyone to reach the destination in each layout, assess the impact of corners on evacuation time. Notably, the layout on the right offers the shortest path, while the leftmost layout has the longest.

Simulations without Waypoints

- **Run Simulations:** Conduct three distinct simulations for each geometry.
- **Data Visualization:** Chart the evacuation times, correlating them with the scenario numbers (1 to 3, left to right).

Simulations with Waypoints

- **Waypoint Implementation:** Introduce waypoints to guide individuals away from the inner corner, thus reducing congestion before the turn.

Experiment with waypoint placement to achieve optimal results.
- **Plot Results:** Display the evacuation times against the scenario numbers (1 to 3, left to right).

Anticipated Outcome

The ideal scenario is for the evacuation time in the corner layout to fall between the times for the shortest and longest direct paths.