To follow these instructions, you will need a portal gun. If a portal gun is fired against a surface, a portal will appear on that surface. The portal will be blue or orange depending on the setting of the gun’s switch. After firing differently colored portals, walking through one portal will cause you to emerge at the other. If you’ve already created a portal and you create another one of the same color, the previous portal will vanish. These instructions will require you to put portals on doors. Note that if both portals are on doors, and you walk through one portal, you emerge from the other with your back to the door.

In these instructions, the number of doors along a wall is defined by counting double doors and elevator doors as one, and not counting doors one must pass through to walk along the corridor.

First fire an orange portal at 4-164, then a blue portal at 4-166. Walk through the blue portal.

8 sets of directions follow, each with a precondition. You must follow each direction set, but in the correct order. Immediately before executing a direction set, you will emerge from a portal on a door. Follow the first direction set in the list below for which its precondition is satisfied on the door you emerged from, and that you have not already followed. At the end of each direction set, you will face a door or a double door; flip the switch on your portal gun, fire a portal at this door, and step through it.

- **Precondition**: The door’s room number, taken as a single integer (removing the dash), is prime.
  **Directions**:
  - If at any point during this instruction set, what you see all around you reminds you of a star piece location, reverse left and right for the remainder of the instruction set.
  - Turn right out of the portal.
  - Go straight. At the next intersection, turn left.
  - When you come to a stairwell door, go through it.
  - Go down one level and exit the stairwell.
  - Follow the wall on your left until you pass through double doors.
  - Continue and face the 6th door on your right.

- **Precondition**: The door has a number pad.
  **Directions**:
  - Turn right out of the portal.
  - Walk until you pass two elevators on your left. Walk straight if you can, but if you are forced to turn, alternate right/left, starting with right. Do not take any stairs.
  - After passing the second elevator, face the second door on your right.

- **Precondition**: The door has a person’s name written on it.
  **Directions**:
  - Go one level up the nearest staircase.
  - Make two lefts turns.
  - Pass three waste receptacles on your right, then turn right.
  - Go one level up the first set of stairs you see.
  - Turn left at the next intersection.
  - Turn right at your next opportunity.
  - Face the first single door on your right.

- **Precondition**: The body of the door is black.
  **Directions**:
  - Go two levels up the nearest staircase.
  - Turn left out of the staircase.
  - Walk along the corridor until you see the neighborhood of one of the star piece locations on your right.
  - Face the next double door on your right.
• **Precondition:** The door’s room number is written on the door itself.
  **Directions:**
  – If at any point during this instruction set, you pass on your right the first-ever of a star piece location, reverse left and right for the remainder of the instruction set.
  – Go one level down the nearest staircase.
  – Go through the door and turn right.
  – Continue straight through a set of double doors.
  – Continue until you reach a point at which you may take two different sets of stairs, take the left one.
  – After you go through a doorway, follow the left wall until you pass through another doorway.
  – Turn right.
  – Go through two doors and face the first door on your left.

• **Precondition:** The room number is not written on the door itself.
  **Directions:**
  – Turn left out of the portal.
  – Walk straight and stop to face the last door on your left before you pass through double doors.

• **Precondition:** The door has a number pad.
  **Directions:**
  – Turn left out of the portal.
  – Go to the end of the hallway and go through the door on the right.
  – Continue to the end of the hallway and go through another door.
  – Go straight through another door.
  – Follow the left wall and go through the first door you come to.
  – Continue along the left wall and face the 9th door you come to.

• **Precondition:** The door is a door.
  **Directions:**
  – Turn left out of the portal.
  – Turn right at the next intersection.
  – Turn left at the next intersection.
  – Continue straight until you see one of the star piece locations.
  – Face the first door on your left.

After completing all the direction sets, the two doors with portals on them will be along the same wall. Find the door at the midpoint between these two doors, as measured by counting doors along the wall. Walk through this door. The only star piece location that you have not already encountered will lead you to whom you seek.