

The S-Curve

Open one hint at a time. Try it before you open the next.

- Hint 1 — Think about it

At every wall, ask two questions: *Is my right open? Is my left open?* Ahead is already blocked — that is why you stopped. Do not measure how **deep** a corner is; only whether there is **more than a lane width of room**.

- Hint 2 — Which blocks to use

repeat until < color sensor sees green >

The main loop — you do not know how many turns there will be.

motor (C) go to position (90 / -90 / 0)

Swings the turret: 90 = look right, -90 = look left, 0 = ahead.

distance sensor B is farther than () cm

True when there is room to move = **open**.

set (right_open) to < ... >

Remember what you saw, then decide.

if ... else if ... else ...

Right first, then left, then dead end.

- Hint 3 — Plan in plain words

1. Loop until green.
2. Drive until a wall is close ahead (or green).
3. Stop. Turret right: is it open? Turret left: is it open? Turret back to ahead.
4. Right open: turn right. Else left open: turn left. Else: turn around.
5. When the loop ends: play the sound.

Watch out: Swing the turret slowly and wait a moment before you read the sensor — it needs time to settle. And measure your own numbers: how far is the wall when the car is centred, and how far is an opening?

Playbook: Stop and look · Open or blocked? · The right-hand rule · Green means go

Keep going: Challenge → [mission-3-challenge.pdf](#) | Solution → [mission-3-solution.pdf](#)

The same content is in the matching .html files.