

# Master 53: Activity 17 Assessment

## Writing Code to Solve Problems

### Writing Code to Solve Problems Behaviours/Strategies

1. Student writes code based on the target number, but the sum of the numbers in the code doesn't equal the target number.

25

"My code is: 5 + 10 + 15."

2. Student has difficulty writing code to represent the jumps on the number line.

"Code for jumps? I don't know how to do that."

3. Student acts out the movement of the robot on the number line, but the robot does not land on the target number.

"I followed the code to move my robot, but it didn't land on the target number."

### Observations/Documentation

4. Student writes code, but the robot does not land on the target number, instead of altering the code, the student starts over to write another code.

"My robot didn't land on the target number. I've got to write the code again."

5. Student writes code based on the target number, but struggles to alter the code to avoid collisions.

Robot A:  $12 + 6 + 7$       Robot B:  $9 + 9 + 7$

"Let's follow the codes and see if the robots ever end up on the same number at the same time."

6. Student writes code based on the target number, alters the code to avoid collisions, and describes how the changes to the code affect the outcome.

"I subtracted 1 from the first jump and added 1 to the third jump. Now we don't collide on the second jump and my robot still ends up on 25."

### Observations/Documentation