EXPERIMENT 3. Set the speed of the robot to 2 times higher than 5. How long of a distance does the robot travel in 2 seconds? Decrease the speed of the robot 2 times. How long of a distance does the robot travel now in 2 seconds?

Look at the solution: https://www.youtube.com/watch?v=hHZcgpFMcoQ

Calculate, what the speed of the robot has to be. The first speed is 2 * 5 = 10. The second speed is 10 : 2 = 5. In the last experiment we learnt that at speed 1 the robot takes roughly 3 seconds to travel 45 cm. Hence we can assume that at speed 3 the robot will take less time to travel that distance, for example 2 seconds instead of 3. Mark a point 45 cm from the starting position.

Make a program that consists of:

1) A motor movement block;
2) A motor speed block that is set to speed 10;
3) A motor timed movement block set to 2 seconds.

Place the robot in the starting position and run the program. The robot moves roughly 40 cm.

Change the speed of the robot to 5.

Place the robot in the same position and run the program. The robot moves roughly 25 cm.