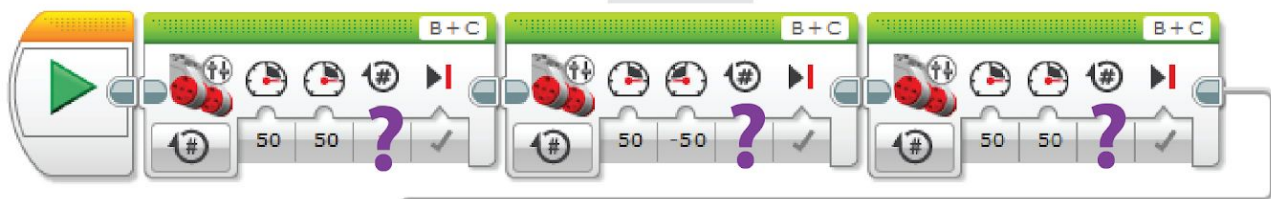


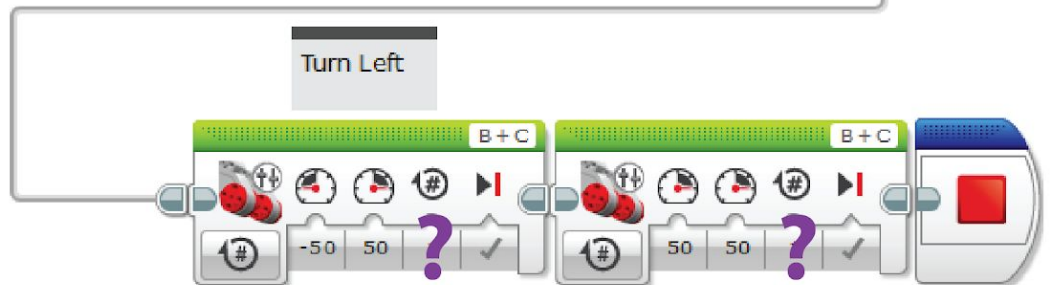
1in=1ft
Scale



Turn Right



Turn Left



Plan your City Shaper mission to get from base to the ramp using the simple EV3 program above. Apply power to both wheels to make your robot go straight. Apply power in **opposite** directions for it to turn.

To do this you will calculate how far your robot travels per rotation of its wheel given the wheel diameter, and how many rotations it takes to move a full turn given the distance between your 2 wheels. Then use that to calculate the rotations for each step above. You may need to know that 1in=2.54cm, 1 FLU (Fundamental Lego Unit) = 0.8 cm and that circumference = 3.14 x diameter.



Robot Design Specifications:	Tire Part 41897 Diameter: 5.6 cm Wheel Base: 9 FLU	Tire Part 44771 Diameter: 6.9cm Wheel Base: 9 FLU	Tire Part 44771 Diameter: 6.9cm Wheel Base: 11 FLU	Tire Part 87911 Diameter: 8.3cm Wheel Base: 11 FLU
Rotations/Foot				
Rotations/360°				
Forward 1 foot				
Turn Right 90°				
Forward 3 feet				
Turn Left 90°				
Forward 1 foot				