**General**

Number of Encoder ticks per revolution: 1024

Distance per revolution: 70 mm \* pi = 21.99 cm

Distance per tick 0.0859 cm

Ticks per metre = 4656

**Corners**

Distance between wheels: 19 cm

Circumference of full circle: 19\*2\*pi=119.2 cm

Outside wheel distance on corner=119.2/4= 29.87 cm

Ticks per outside encoder per corner = 29.87/0.0859 = 374

180 degree turn

The wheels each trace a semi circle, but because they move in opposite directions, the circumference is halved.

Circumference is 19\*pi = 59.69

Each wheel travels half of that, 29.87 cm!!!!!!