If the distance
or time is not
specific
- use UNLIMITED
for duration.

If the distance is
specific
- duration is in rotations
or degrees

1 rotation
of the motor
equals 360° of
the motor

___ rotations X 360 = ___ degrees

divide $\frac{\text{distance}}{\text{C of the wheel}}$ = ____ rotations

$C = d \times \pi$

dia wheel = 56 mm

$\pi = 3.14159$

$56 \times 3.14159 =$

C = 175.93 mm

of wheel

900 mm ____ rot.

1000 mm ____ degrees

rot x 360 = ____ deg.

60 cm ____ rot.

600 mm

65 cm ____ deg.

650 mm

40 cm ____ rot.

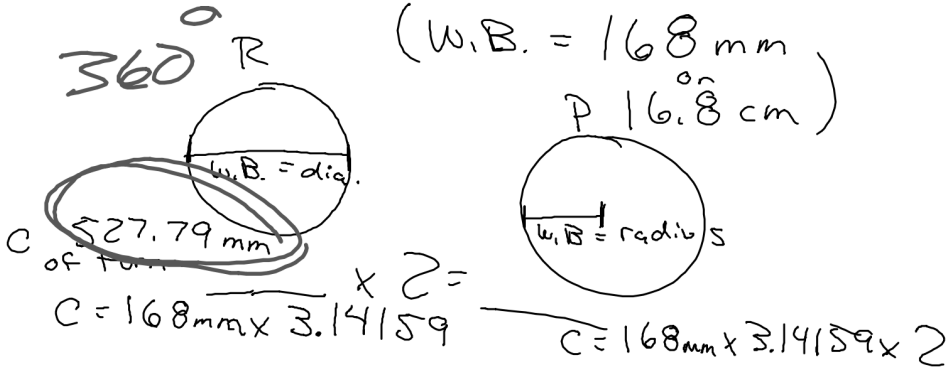
400 mm

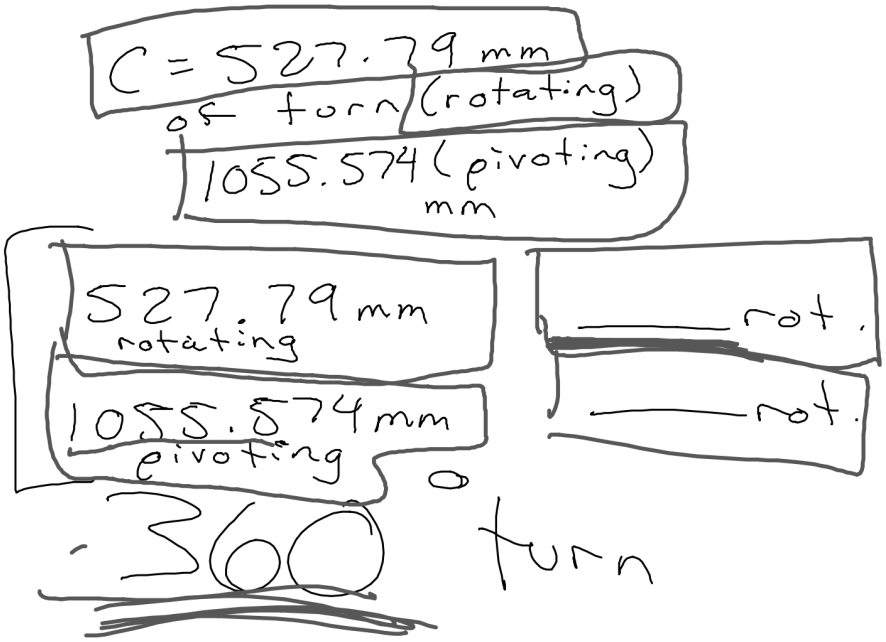
Turning

Rotating vs. Pivoting

* Know the Wheel Base
* Calculate C of turn

(W.B. = 168 mm or 16.8 cm)





Turn your robot

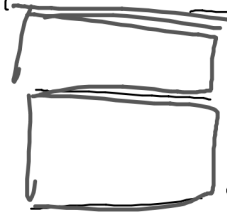
rotating

= 90° turn

deg. = 180° turn

rot x 360 = ____ deg.

pivoting



rot. = 45° turn

deg. = 120° turn