

#8 Into Orbit – Distance Lab



Forward with Move Steering block

1. Find average distance of three rotations.

Power	First Trial	Second Trial	Third Trial	Average
%	cm	cm	cm	cm
%	cm	cm	cm	cm
%	cm	cm	cm	cm
%	cm	cm	cm	cm

2. Calculate the average distance for one rotation(1R) = Average of 3 distances ÷ 3

Power	Three rotations	Divide by 3	Distance travel from one rotation (1R)
%	cm	÷ 3	cm
%	cm	÷ 3	cm
%	cm	÷ 3	cm
%	cm	÷ 3	cm

3. Calculate the Rotation per centimeter $RCM = 1 \div 1R$ or
Degree per centimeter $DCM = 360 \div 1R$

Power	%	%	%	%
Rotations/cm (RCM)	rotations	rotations	rotations	rotations
Degrees/cm (DCM)	degrees	degrees	degrees	degrees

4. Find the rotation or degrees for measured distance:

Example = Robot needs to travel 10 cm at 50 power.

of rotations = $R/cm \times 10$

of degrees = $D/cm \times 10$
