UNIVERSIDAD POLITÉCNICA DE LA ZONA METROPOLITANA DE GUADALAJARA

Practica 2

Actividad: Practica 2
Materia: Cinemática de Robots
Alumnos: Alfredo Rizo Martinez
Maestro: Carlos Enrique Moran Garabito

9.- (3,-9) (-8,5) (-4,-1)

L1 = 30

L2 = 45

(3,-9)

L1 = 30

L2 = 45

$$q2=\text{atan}((3)2+(-9)2-(30)2-(45)22(30)(45))= -28352700$$
$$= -1.05q2=\text{atan}(-1.05)q2=-46.397q2=\text{atan}(-93)-\text{atan}(45$$
$$s\quad(-46.397)30+45\cos(-46.397))= -32.58661.034 =$$
$$0.533q1=\text{atan}(-3)-\text{atan}(-0.533) =$$
$$-43.50[x\ ]=[-30s\quad(-43.50)-45s\quad(-43.50)+(-46.397)-4$$
$$5sen(-43.50)+(-46.397)30c\quad(-43.50)+45c\quad(-43.50)+(-$$
$$46.397)+45c\quad(-43.50)+(-46.397)][q1q2]$$

(-8,5)

L1 = 30

L2 = 45

$$q2=\text{atan}((-8)2+(5)2-(30)2-(45)22(30)(45))= -28362700$$
$$= -1.05q2=\text{atan}(-1.05)q2=-46.397q2=\text{atan}(5-8)-\text{atan}(45$$
$$s\quad(-46.397)30+45\cos(-46.397))= -32.58661.034 =$$
$$0.533q1=\text{atan}(-0.625)-\text{atan}(-0.533) =$$
$$-3.94[x\ ]=[-30s\quad(-3.94)-45s\quad(-3.94)+(-46.397)-45s$$
$$n(-3.94)+(-46.397)30c\quad(-3.94)+45c\quad(-3.94)+(-46.397)$$
$$+45c\quad(-3.94)+(-46.397)][q1q2]$$

(-4,-1)

L1 = 30

L2 = 45

$$q2=\text{atan}((-4)2+(-1)2-(30)2-(45)22(30)(45))=$$

$$-29082700 =$$

$$-1.077q2=\text{atan}(-1.077)q2=-47.123q2=\text{atan}(-1-4)-\text{atan}(4$$

$$5\ s\quad(-47.123)30+45\cos(-47.123))=-32.9760.61 =$$

$$-0.543q1=\text{atan}(0.250)-\text{atan}(-0.543) =$$

$$42.53[x\ ]=[-30s\quad(42.53)-45s\quad(42.53)+(-47.123)-45s$$

$$(42.53)+(-47.123)30c\quad(42.53)+45c\quad(42.53)+(-47.123)+4$$

$$5c\quad(42.53)+(-47.123)][q1q2]$$