UNIVERSIDAD POLITÉCNICA
DE LA ZONA METROPOLITANA DE GUADALAJARA

Ángulos de posición original.

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Encontrar los angulos de posición original (4,6), $l_1 = 30, l_2 = ?$.

A nosotros nos tocó el 3 que corresponde: $(1,-3), (5,2), (-4,-3)$.

$$(1,-3)$$

$$q_2 = \text{atan}\left(\frac{(1)^2 + (-3)^2 - (20)^2 - (30)^2}{2(20)(30)}\right) = -47.070$$

$$q_1 = \text{atan}\left(\frac{-3}{1}\right) - \text{atan}\left(\frac{(30)\sin(-47.07)}{(20) + (30)\cos(-47.07)}\right) = -43.05$$

$$(5,2)$$

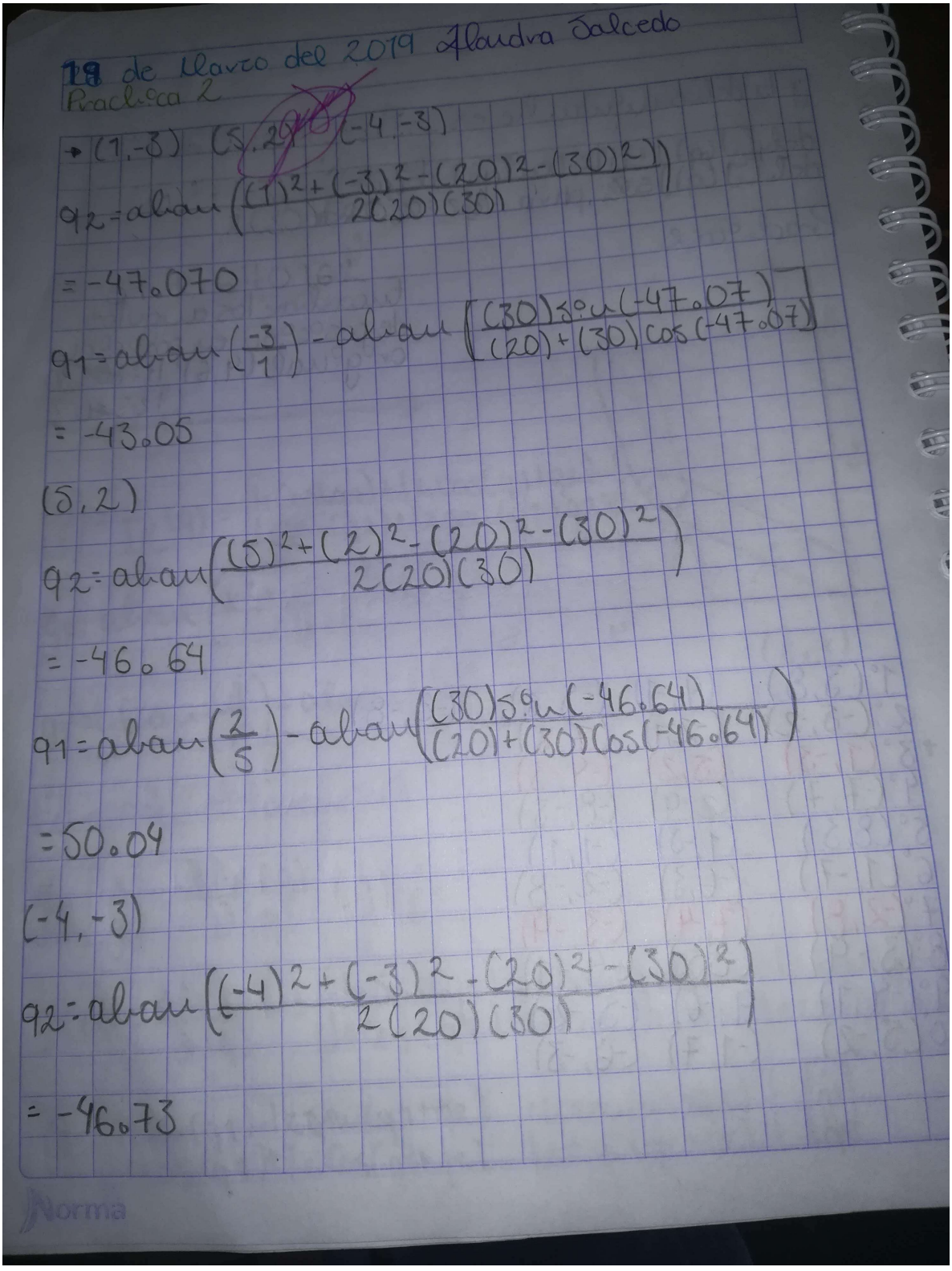
$$q_2 = \text{atan}\left(\frac{(5)^2 + (2)^2 - (20)^2 - (30)^2}{2(20)(30)}\right) = -46.64$$

$$q_1 = \text{atan}\left(\frac{2}{5}\right) - \text{atan}\left(\frac{(30)\sin(-46.64)}{(20) + (30)\cos(-46.64)}\right) = -50.04$$

$$(-4,-3)$$

$$q_2 = \text{atan}\left(\frac{(-4)^2 + (-3)^2 - (20)^2 - (30)^2}{2(20)(30)}\right) = -46.73$$

$$q_1 = \text{atan}\left(\frac{-3}{-4}\right) - \text{atan}\left(\frac{(30)\sin(-46.73)}{(20) + (30)\cos(-46.73)}\right) = -65.17$$


19 de Marzo del 2019 Claudia Salcedo
Practica 2
(7,-8) (5,2) (-4,-3)
q2 = alcos((7)^2+(-8)^2-(20)^2-(30)^2 / 2(20)(30))
= -47.070
q1 = alcos(-8/7) - alcos([(30)sen(-47.07)] / [(20)+(30)cos(-47.07)])
= -43.05
(5,2)
q2 = alcos((5)^2+(2)^2-(20)^2-(30)^2 / 2(20)(30))
= -46.64
q1 = alcos(2/5) - alcos((30)sen(-46.64) / (20)+(30)cos(-46.64))
= 50.04
(-4,-3)
q2 = alcos((-4)^2+(-3)^2-(20)^2-(30)^2 / 2(20)(30))
= -46.73
Norma