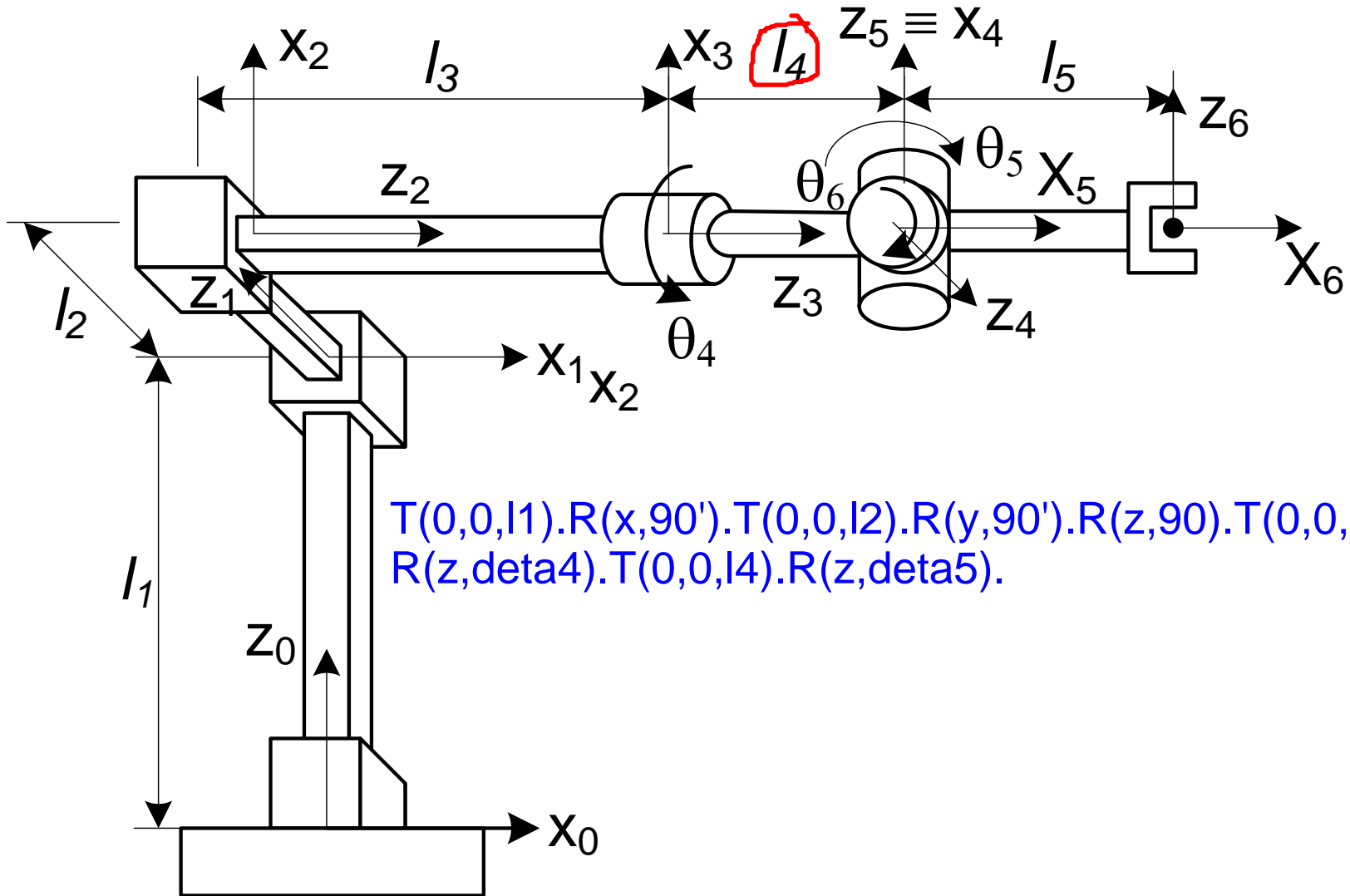


BÀI TẬP KỸ THUẬT ROBOT

Instructor: Nguyen Truong Thinh

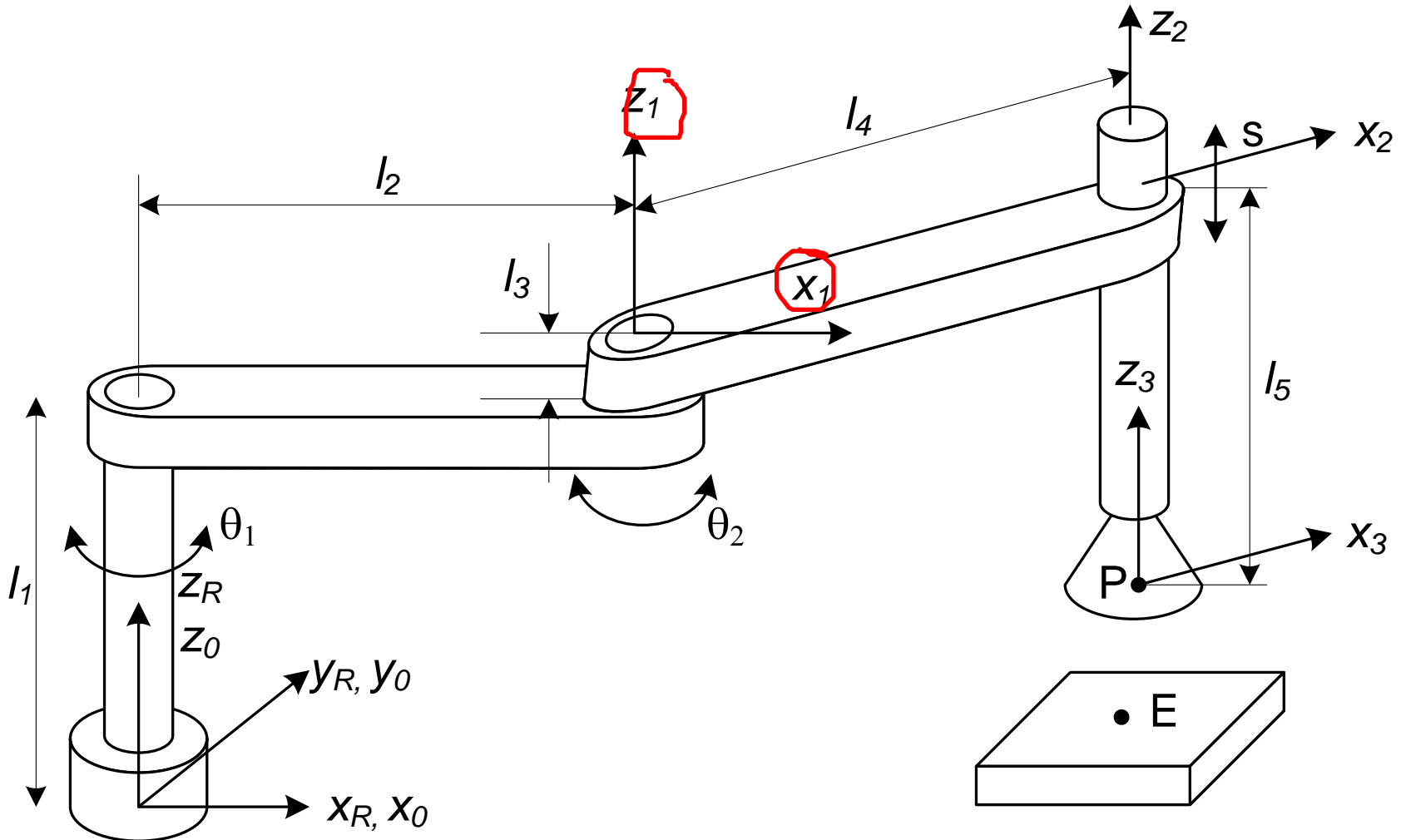
Bài 1



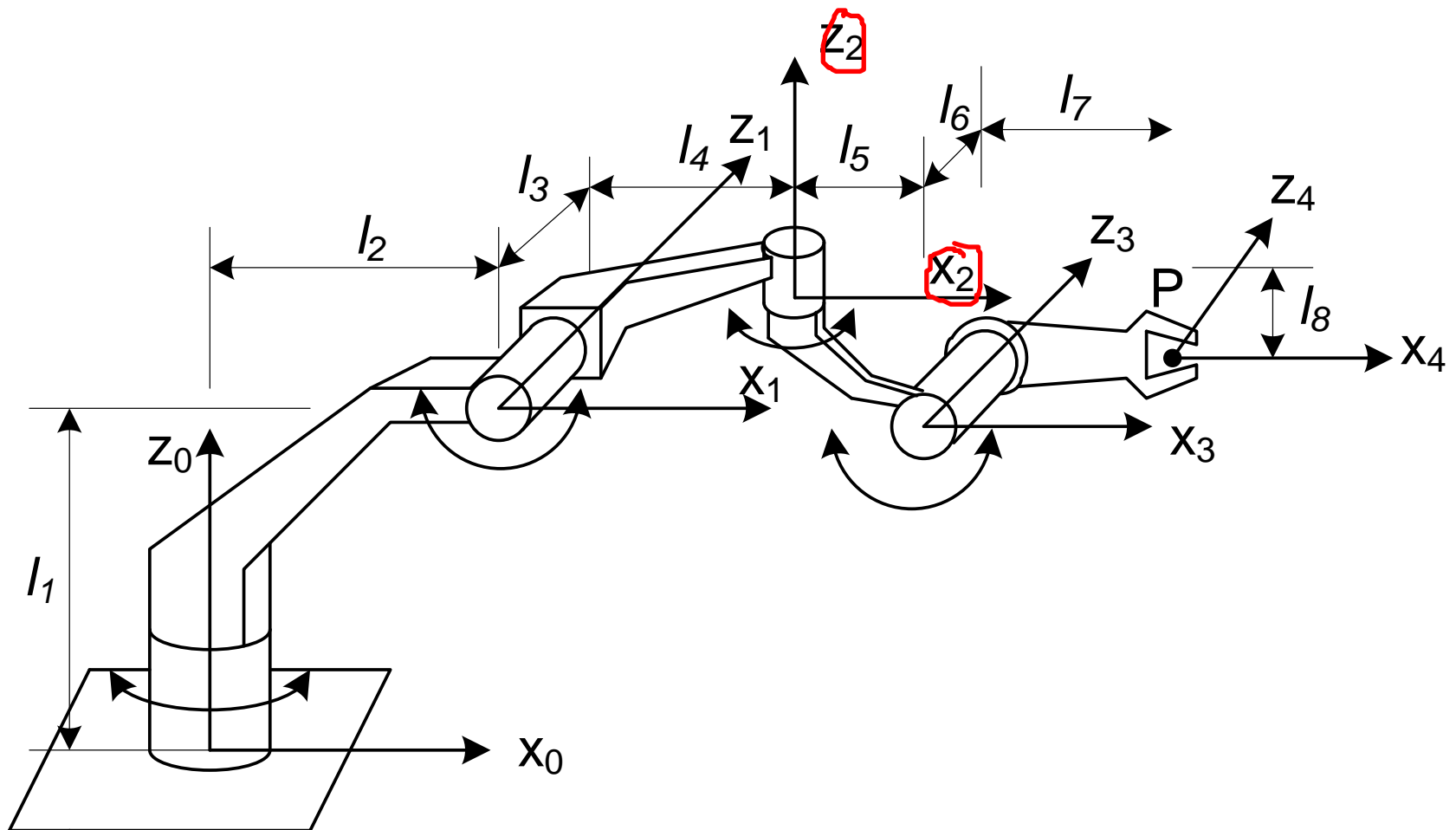
$T(0,0,l_1) \cdot R(x,90^\circ) \cdot T(0,0,l_2) \cdot R(y,90^\circ) \cdot R(z,90^\circ) \cdot T(0,0,l_3) \cdot$
 $R(z,\theta_4) \cdot T(0,0,l_4) \cdot R(z,\theta_5) \cdot$

Bài 2

$$P_0 = R(z, \text{deta1}).T(l_2, 0, l_1 + l_3).R(z, \text{deta2}).T(l_4, 0, -l_5).P_3$$



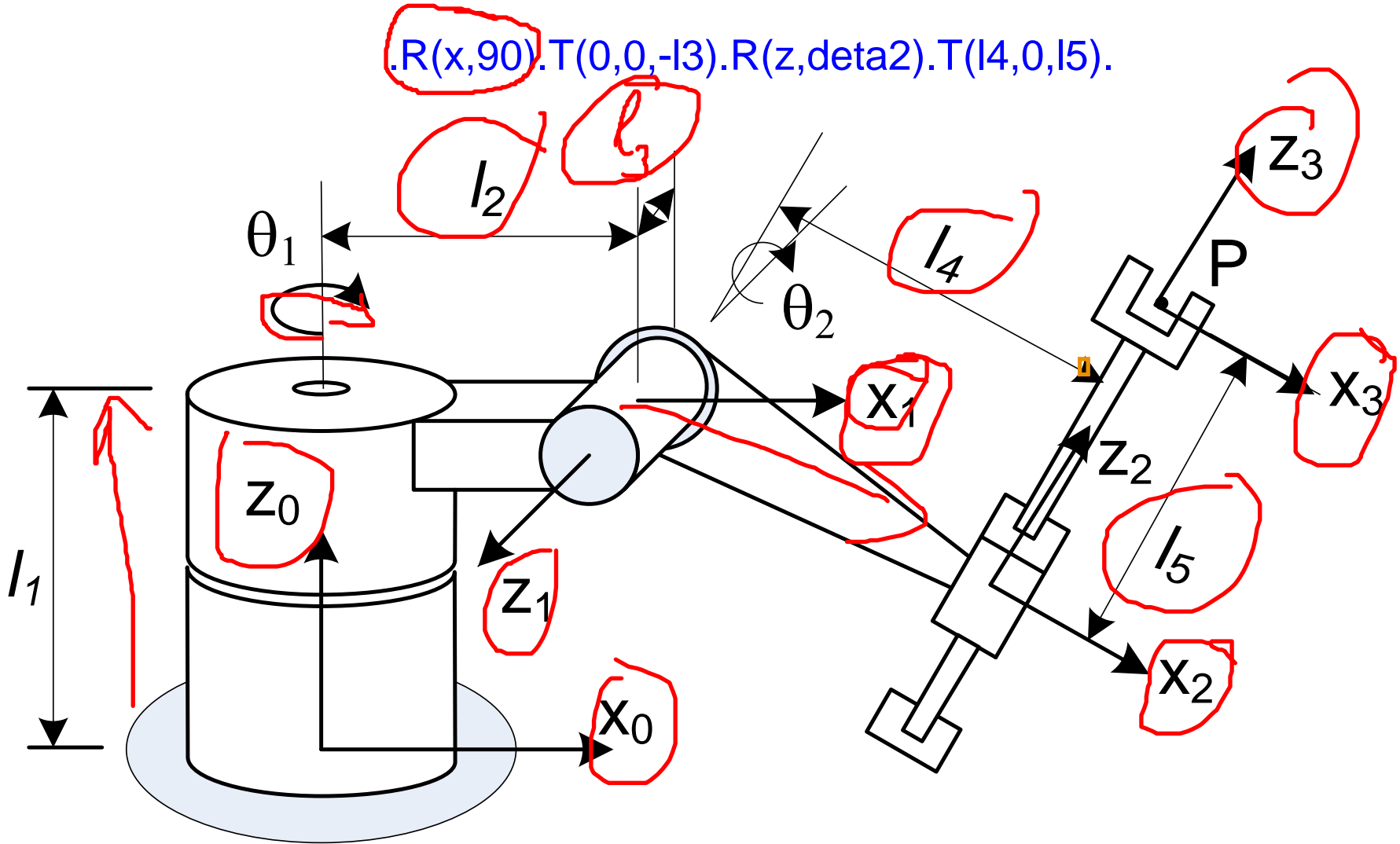
Bài 3



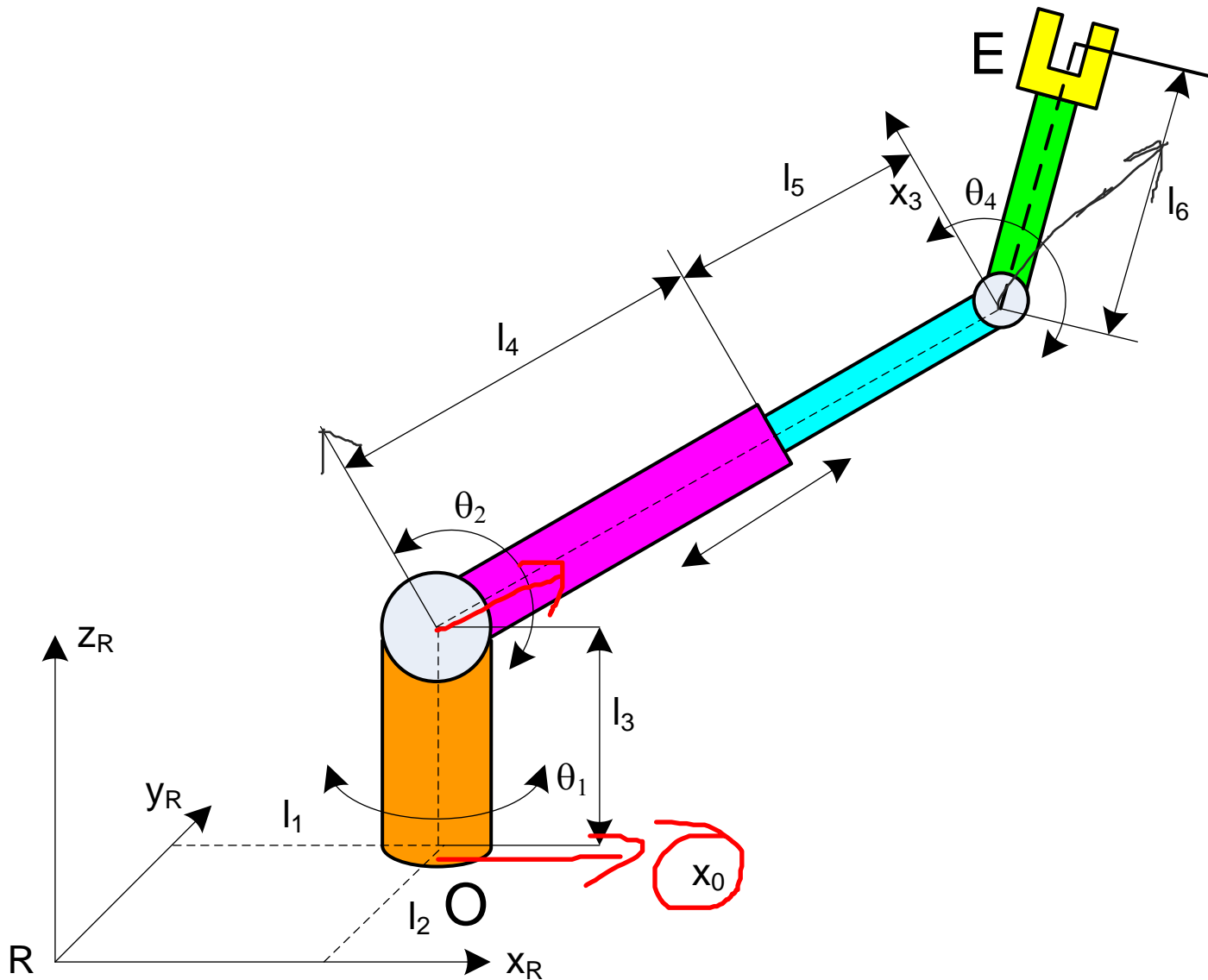
$T(0,0,l_1)R(z,\text{deta1}).T(l_2,0,0)$

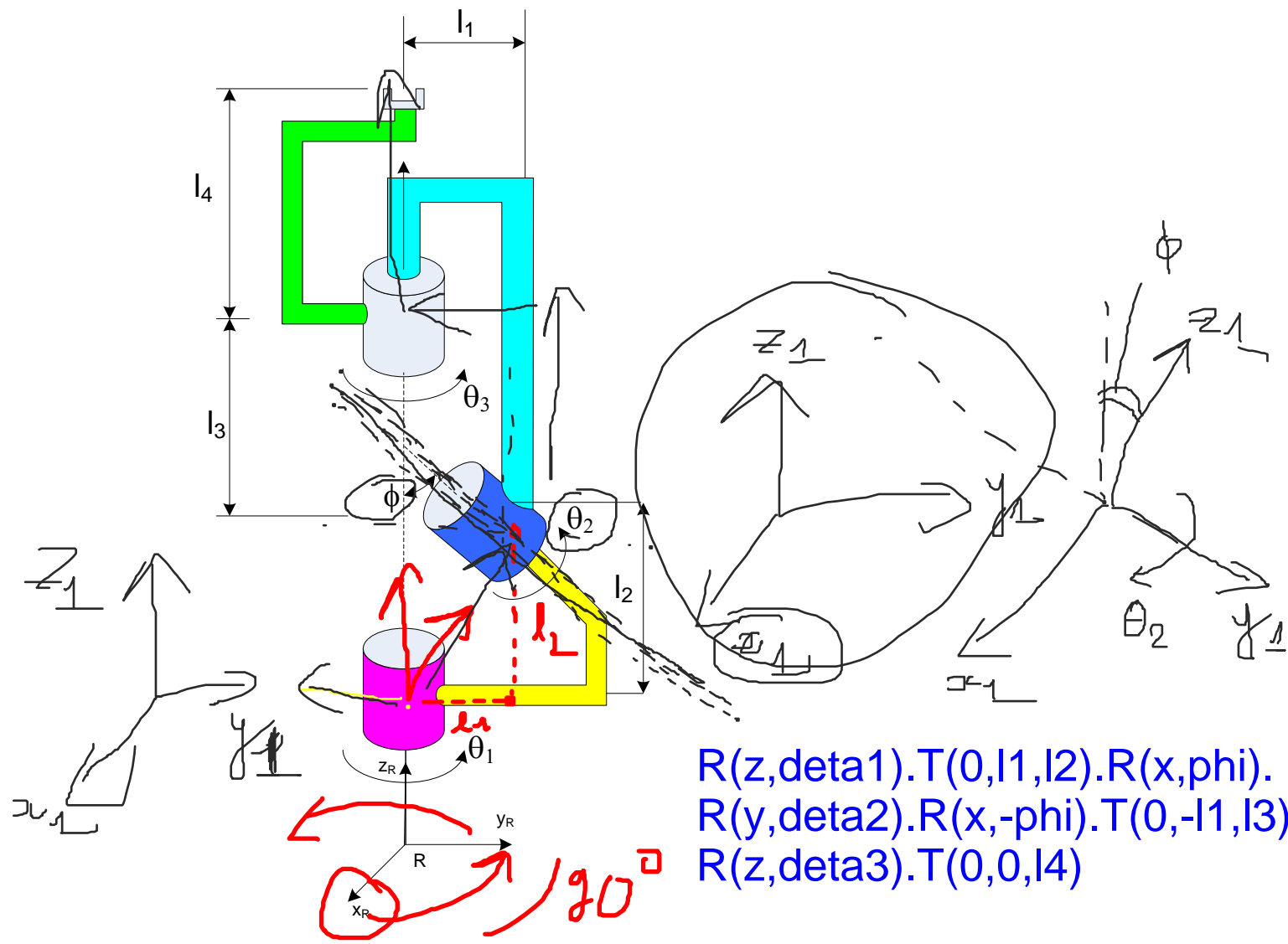
Bài 4

$.R(x,90).T(0,0,-l_3).R(z,\text{deta2}).T(l_4,0,l_5).$



$$T(l_1, l_2, 0) \cdot R(z, \text{deta1}) \cdot T(0, 0, l_3) \cdot R(y, \text{deta2}) \cdot T(l_4 + l_5, 0, 0) \cdot R(y, \text{deta4}) \cdot T(l_6, 0, 0)$$

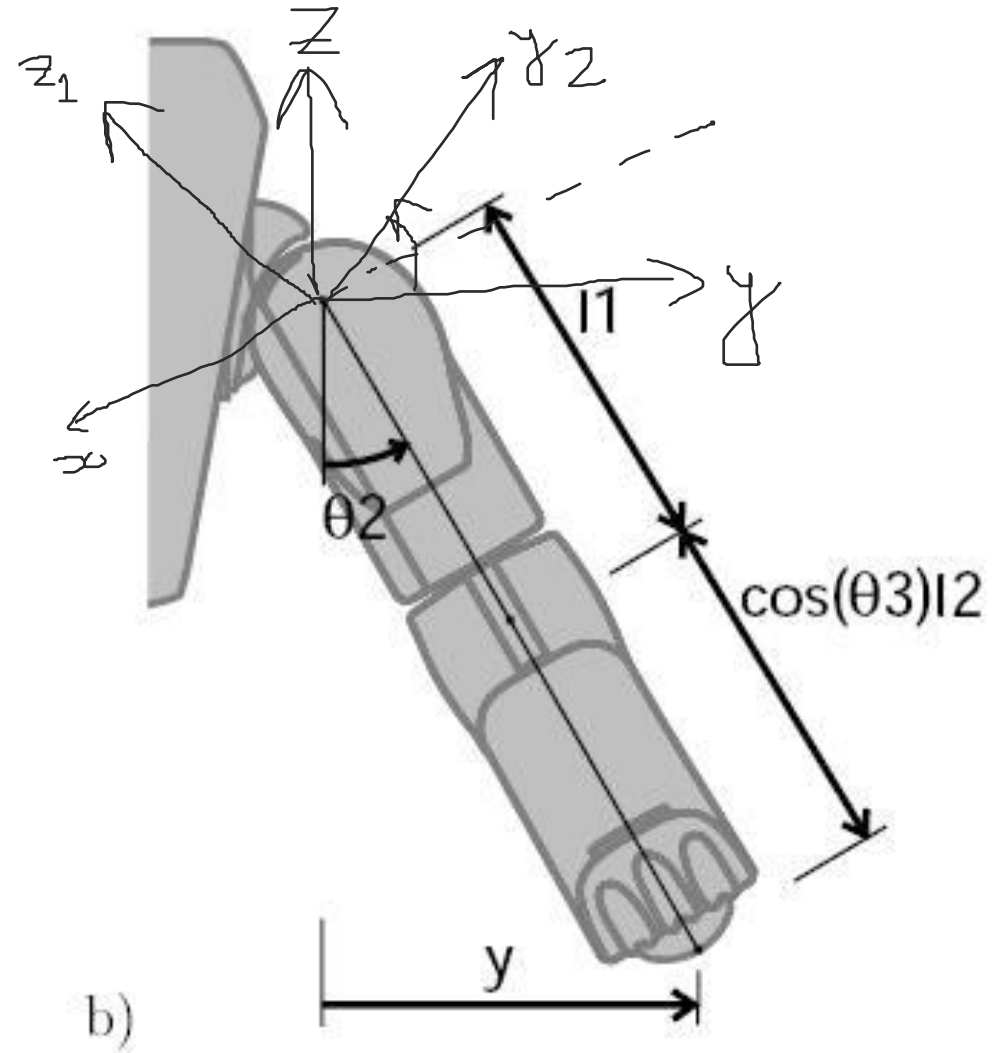
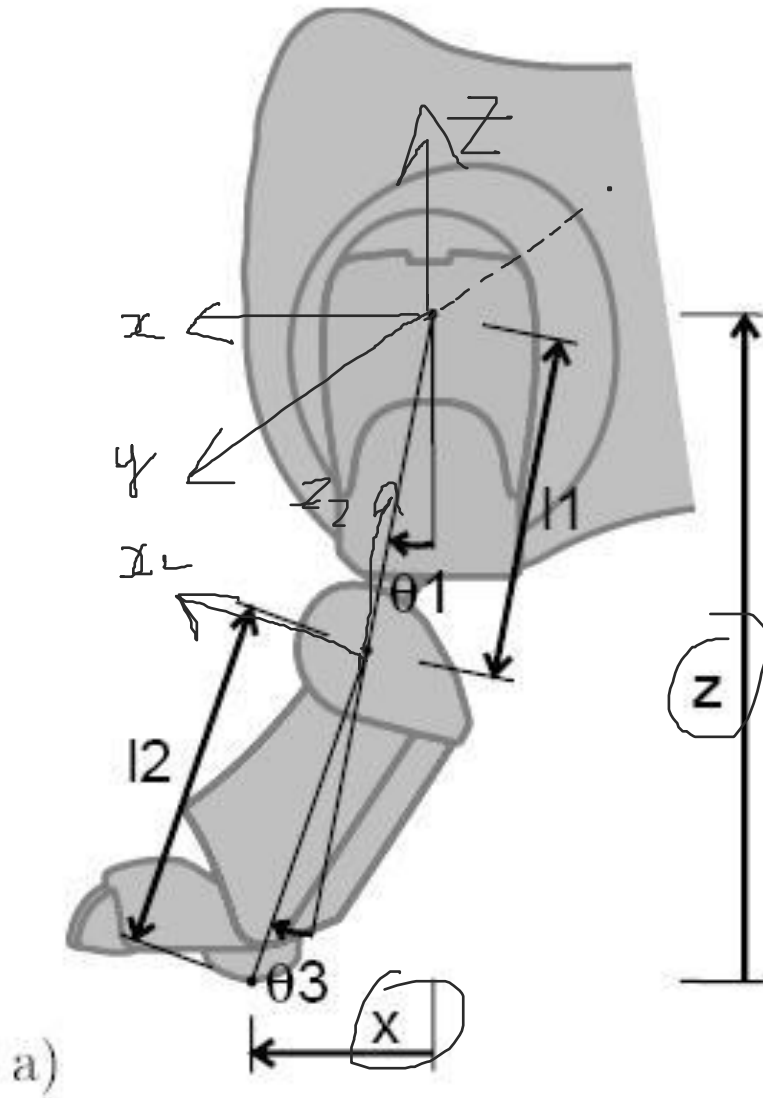




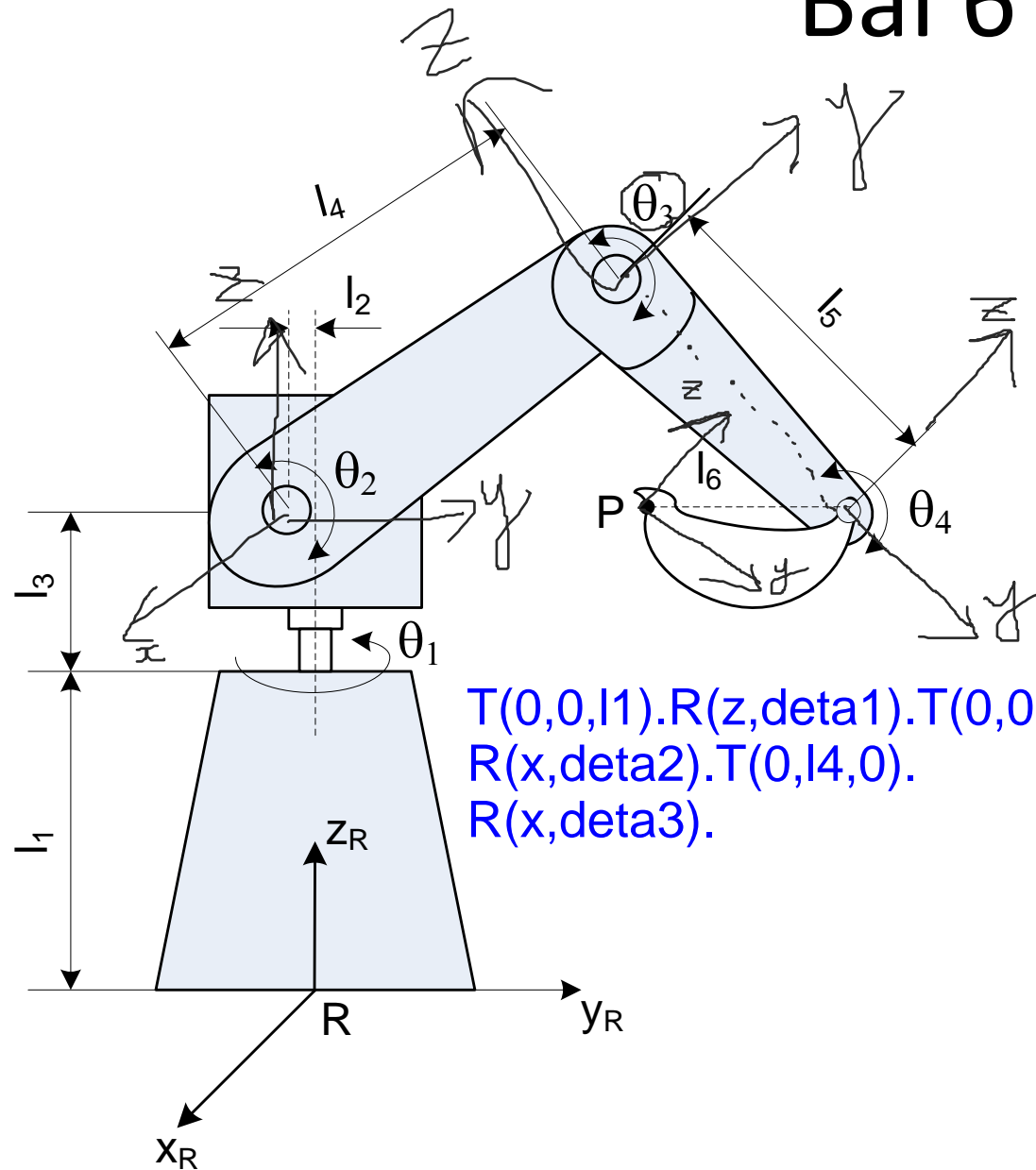
Bài 5

$R(y, \text{deta1}).T(0,0,-l1).R(y, \text{deta3}).T(0,0,-l2)$

$R(x, \text{det2}).T(0,0,-l1 - \cos(\text{deta3}) * l2)$

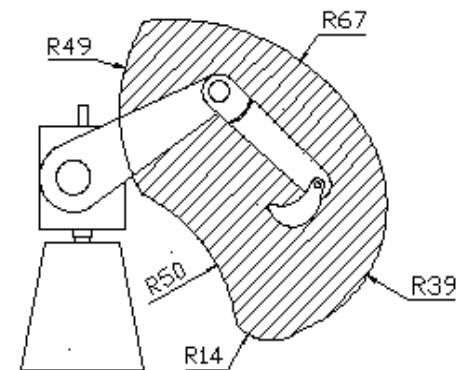


Bài 6

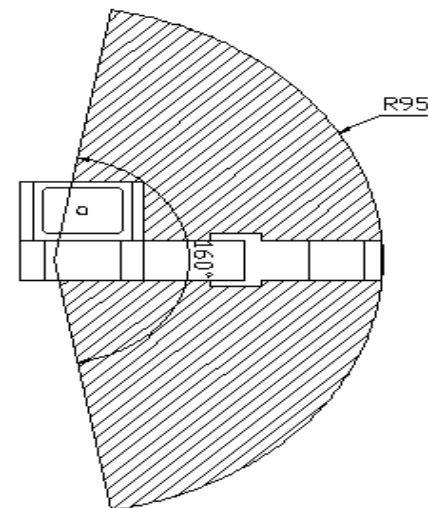


$T(0,0,l_1).R(z,deta1).T(0,0,l_3)$
 $R(x,deta2).T(0,l_4,0).$
 $R(x,deta3).$

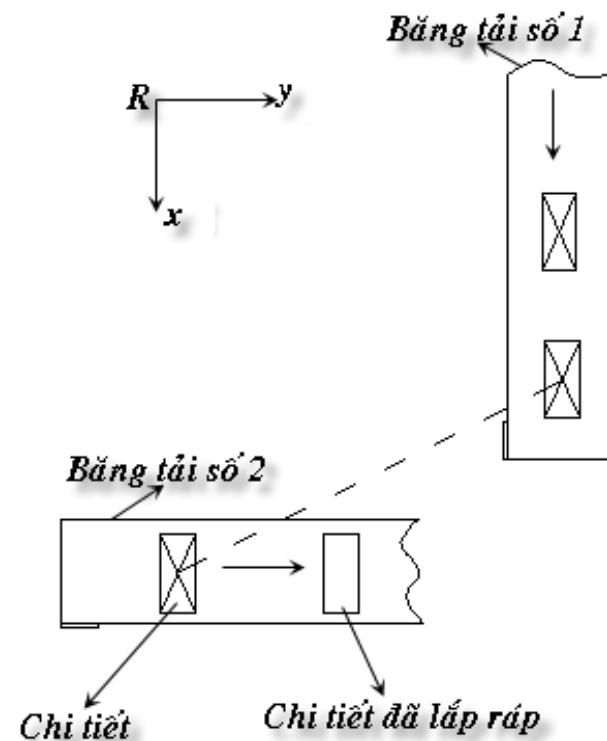
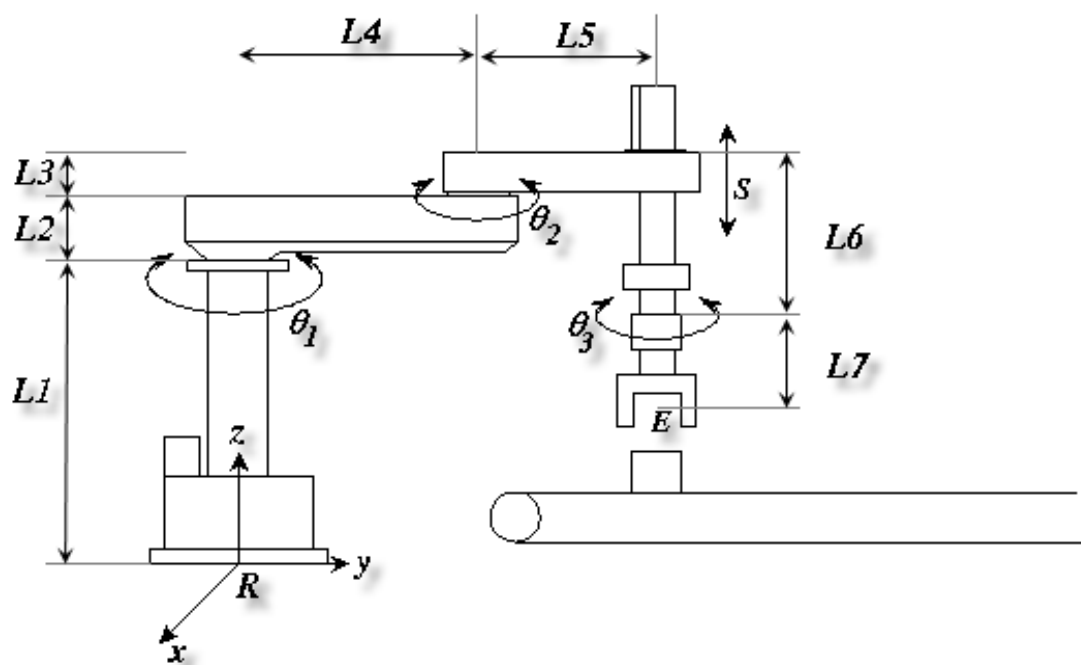
Chiếu cạnh



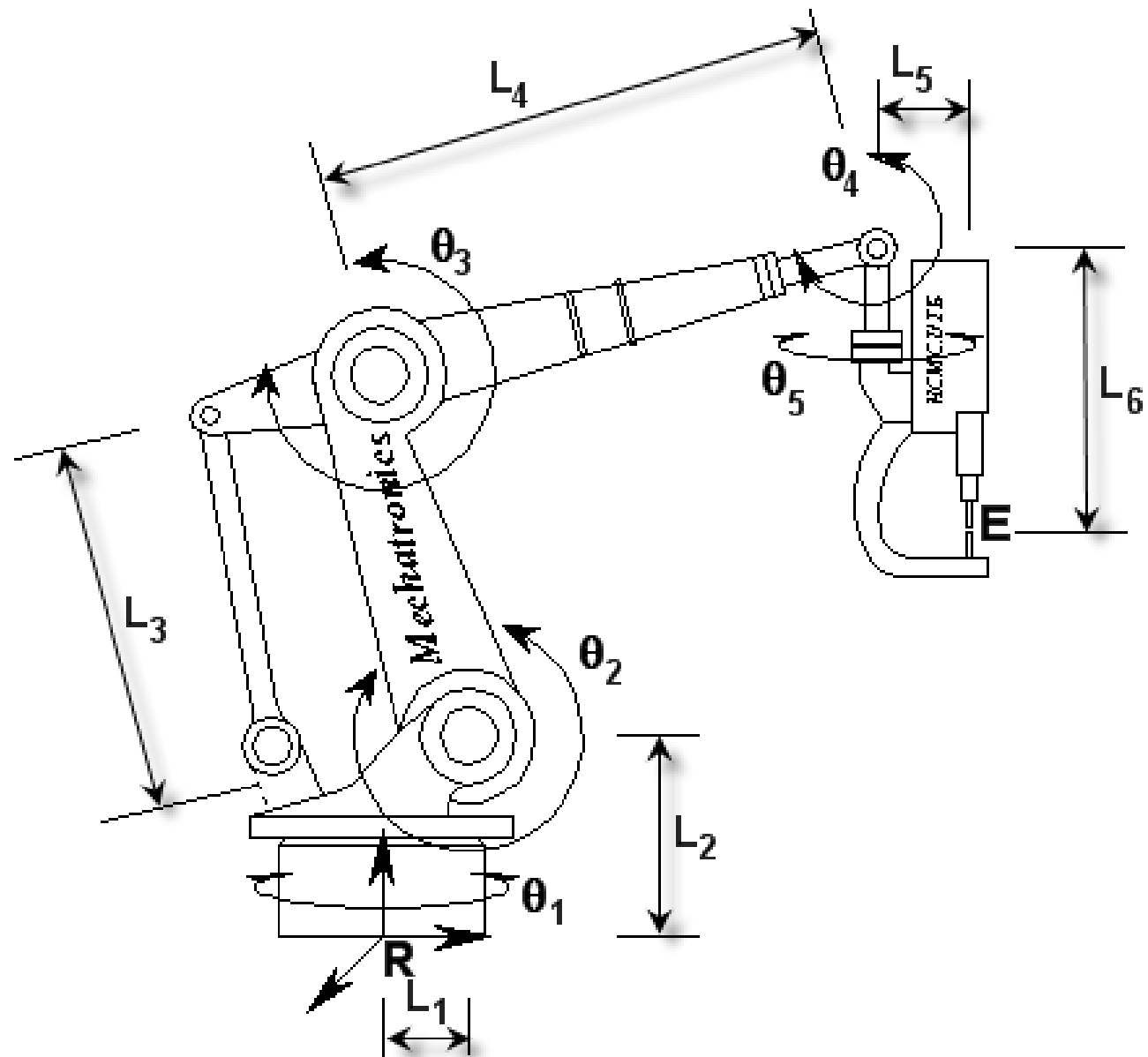
Chiếu bằng



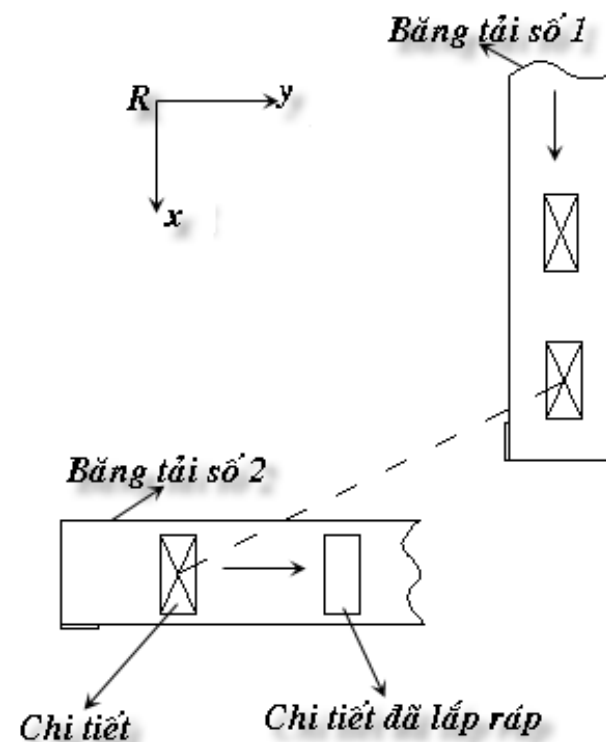
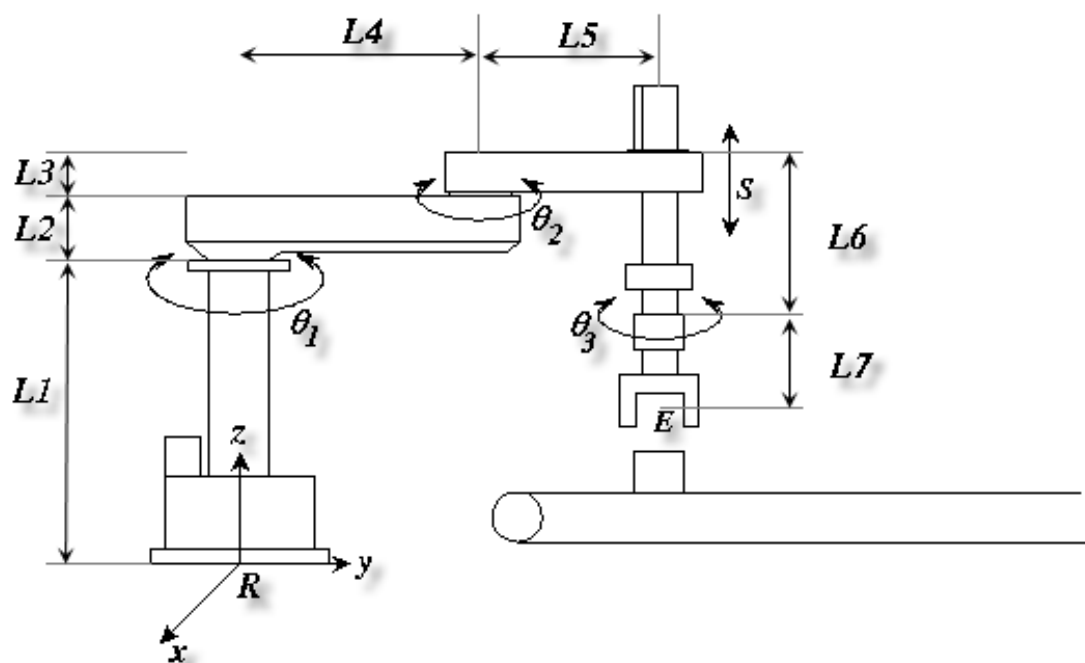
Bài 7



Bài 8



Bài 9



Bài 10

