```
b =3;
l = b/2;
r=0.2;
delta_x=0.7;
delta_y = 1.5;
delta_theta = 0;
theta = atan2(delta_y, delta_x)
alpha = deg2rad(90);
alpha_r = deg2rad(-90);
beta_r=deg2rad(180);
l_r=b/2;

R_star_l = [sin(alpha + beta) -cos(alpha + beta) -l*cos(beta)]

Rotation = [cos(theta) -sin(theta) 0;sin(theta) cos(theta) 0;0 0 1]
XI_W = [delta_x;delta_y;delta_theta]
phi_l = R_star_l * Rotation * XI_W * 1/r

R_star_r = [sin(alpha_r + beta_r) -cos(alpha_r + beta_r) -
l*cos(beta_r)]
phi_r =  R_star_r * Rotation * XI_W * 1/r


theta =

    1.1342


R_star_l =

    1.0000   -0.0000   -1.5000


Rotation =

    0.4229   -0.9062         0
    0.9062    0.4229         0
         0         0    1.0000


XI_W =

    0.7000
    1.5000
         0


phi_l =

   -5.3163
```

```
R_star_r =

    1.0000   -0.0000    1.5000

phi_r =

   -5.3163
```

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