

MATRIZ 1

y=90*%pi/180 x=1.5707963
x=30*%pi/180 y=0.5235988
z=70*%pi/180 z=1.2217305

A= [cos(z),-sin(z),0;sin(z),cos(z),0;0,0,1]
A= 0.3420201 -0.9396926 0. 0.9396926 0.3420201 0. 0. 0. 1.

B= [cos(x),0,sin(x);0,1,0;-sin(x),0,cos(x)]
B= 0.8660254 0. 0.5 0. 1.0. -0.5 0. 0.8660254

C= [1,0,0;0,cos(y),-sin(y);0,sin(y),cos(y)]
C= 1. 0. 0. 0. 0. -1. 0. 1. 0.

A*B*C =

0.2961981 0.1710101 0.9396926
0.8137977 0.4698463 -0.3420201 -0.5 0.8660254 0.

MATRIZ 2

y=75*%pi/180 y=1.3089969
x=60*%pi/180 x=1.0471976
z=7*%pi/180 y1 =0.122173

A= [cos(z),0,sin(z);0,1,0;-sin(z),0,cos(z)]
A= 0.9925462 0. 0.1218693 0. 1.0. -0.1218693 0. 0.9925462

B= [1,0,0;0,cos(x),-sin(x);0,sin(x),cos(x)]
B= 1.0. 0. 0. 0.5 -0.8660254 0. 0.8660254 0.5

C= [cos(y),0,sin(y);0,1,0;-sin(y),0,cos(y)]
C= 0.258819 0. 0.9659258 0. 1.0. -0.9659258 0. 0.258819

A*B*C =

0.1980315 0.1055419 0.974497
0.8365163 0.5 -0.2241439 -0.5109051 0.8595702 0.0107282

MATRIZ 3

$$y=15*\%pi/180 \text{ } z1 =0.2617994$$

$$x=35*\%pi/180 \text{ } x=0.6108652$$

$$z=45*\%pi/180 \text{ } z=0.7853982$$

$$A= [\cos(z),-\sin(z),0;\sin(z),\cos(z),0;0,0,1]$$

$$A= 0.7071068 \text{ } -0.7071068 \text{ } 0. \text{ } 0.7071068 \text{ } 0.7071068 \text{ } 0. \text{ } 0. \text{ } 0. \text{ } 1.$$

$$B= [1,0,0;0,\cos(x),-\sin(x);0,\sin(x),\cos(x)]$$

$$B= 1.0. \text{ } 0. \text{ } 0. \text{ } 0.819152 \text{ } -0.5735764 \text{ } 0. \text{ } 0.5735764 \text{ } 0.819152$$

$$C= [\cos(y),-\sin(y),0;\sin(y),\cos(y),0;0,0,1]$$

$$C= 0.9659258 \text{ } -0.258819 \text{ } 0. \text{ } 0.258819 \text{ } 0.9659258 \text{ } 0. \text{ } 0. \text{ } 0. \text{ } 1.$$

$$A*B*C =$$

$$0.5330975 \text{ } -0.8329279 \text{ } 0.1484525 \text{ } 0.742504 \text{ } 0.3764785 \text{ } -0.5540323 \\ 0.4055798 \text{ } 0.4055798 \text{ } 0.819152$$

MATRIZ 4

$$y=45*\%pi/180 \text{ } z=0.7853982$$

$$x=35*\%pi/180 \text{ } x=0.6108652$$

$$z=15*\%pi/180 \text{ } z1 =0.2617994$$

$$A= [\cos(z),-\sin(z),0;\sin(z),\cos(z),0;0,0,1]$$

$$A= 0.9659258 \text{ } -0.258819 \text{ } 0. \text{ } 0.258819 \text{ } 0.9659258 \text{ } 0. \text{ } 0. \text{ } 0. \text{ } 1.$$

$$B= [1,0,0;0,\cos(x),-\sin(x);0,\sin(x),\cos(x)]$$

$$B= 1.0. \text{ } 0. \text{ } 0. \text{ } 0.819152 \text{ } -0.5735764 \text{ } 0. \text{ } 0.5735764 \text{ } 0.819152$$

$$C=[\cos(y),-\sin(y),0;\sin(y),\cos(y),0;0,0,1]$$

$$C= 0.7071068 \text{ } -0.7071068 \text{ } 0. \text{ } 0.7071068 \text{ } 0.7071068 \text{ } 0.0. \text{ } 0. \text{ } 1.$$

$$A*B*C =$$

$$0.5330975 \text{ } -0.742504 \text{ } 0.4055798 \text{ } 0.8329279 \text{ } 0.3764785 \text{ } -0.4055798 \\ 0.1484525 \text{ } 0.5540323 \text{ } 0.819152$$