

```

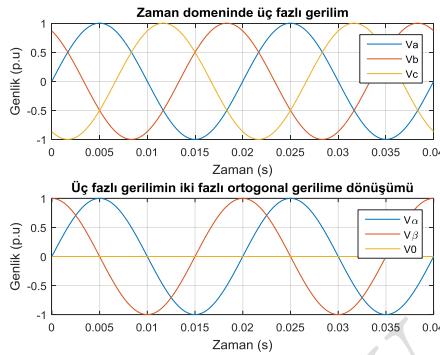
clear all; clc; format rat
clarke=(2/3)*[1 -1/2 -1/2;0 sqrt(3)/2 -sqrt(3)/2;1/2 1/2 1/2]
inv(clarke)

```

```

clear all; clc;
f=50; w=2*pi*f; t=linspace(0,2/f,256); wt=w*t;
va=1.0*sin(wt);vb=1.0*sin(wt+2*pi/3);vc=1.0*sin(wt-2*pi/3);
valfa=(2/3)*(va-vb/2-vc/2);vbeta=(2/3)*(sqrt(3)*vb/2-
sqrt(3)*vc/2);vsifir=(2/3)*(va/2+vb/2+vc/2);
subplot(211); plot(t,va,t,vb,t,vc); grid on; legend('Va','Vb','Vc');
xlabel('Zaman (s)'); ylabel('Genlik (p.u)');title('Zaman domeninde üç fazlı gerilim');
subplot(212); plot(t,valfa,t,vbeta,t,vsifir); grid on; legend('V\alpha','V\beta','V0');
xlabel('Zaman (s)'); ylabel('Genlik (p.u)');
title('Üç fazlı gerilimin iki fazlı ortogonal gerilime dönüşümü');

```



```

clear all; clc;
f=50; w=2*pi*f; t=linspace(0,2/f,256); wt=w*t;
va=1.0*sin(wt);vb=1.0*sin(wt+2*pi/3);vc=1.0*sin(wt-2*pi/3);
valfa=(2/3)*(va-vb/2-vc/2);vbeta=(2/3)*(sqrt(3)*vb/2-
sqrt(3)*vc/2);vsifir=(2/3)*(va/2+vb/2+vc/2);
subplot(311); plot(t,va,t,vb,t,vc); grid on; legend('Va','Vb','Vc');
xlabel('Zaman (s)'); ylabel('Genlik (p.u)');title('Zaman domeninde üç fazlı gerilim');
subplot(312); plot(t,valfa,t,vbeta,t,vsifir); grid on; legend('V\alpha','V\beta','V0');
xlabel('Zaman (s)'); ylabel('Genlik (p.u)');
title('Üç fazlı gerilimin iki fazlı ortogonal gerilime dönüşümü');
val=valfa; vb1=-valfa/2+sqrt(3)*vbeta/2; vc1=-valfa/2-sqrt(3)*vbeta/2;
subplot(313); plot(t,val,t,vb1,t,vc1); grid on; legend('Va','Vb','Vc');
xlabel('Zaman (s)'); ylabel('Genlik (p.u)');
title('İki fazlı ortogonal gerilimin üç fazlı gerilime dönüşümü');

```

