

```

> Vm:=33.94113;
      Vm := 33.94113
> V1:=Vm*cos(theta);
      V1 := 33.94113 cos(θ)
> V2:=Vm*cos(theta-2*Pi/3);
      V2 := -33.94113 cos(θ + 1/3 π)
> V3:=Vm*cos(theta-4*Pi/3);
      V3 := -33.94113 sin(θ + 1/6 π)
> Vrms:=sqrt(1/(2*Pi)*int(V1**2,theta=0..2*Pi));
      Vrms := 42.53889808 √(1/π)
> evalf(Vrms);
      24.00000319
> VV13:=1/(2*Pi)*int((V1-V3)**2,theta=0..2*Pi);
      VV13 := 5428.673545/π
> V13:=sqrt(VV13);
      V13 := 73.67953274 √(1/π)
> evalf(V13);
      41.56922489
> VVdc:=1/(Pi/3)*int((V1-V3)**2,theta=0..Pi/3);
      VVdc := 9918.150432/π
> Vdc:=simplify(sqrt(VVdc));
      Vdc := 56.18759058

```

```

> evalf(Vdc);
56.18759058
> Vdc/V13;
.7625942849
      
$$\frac{.7625942849}{\sqrt{\frac{1}{\pi}}}$$

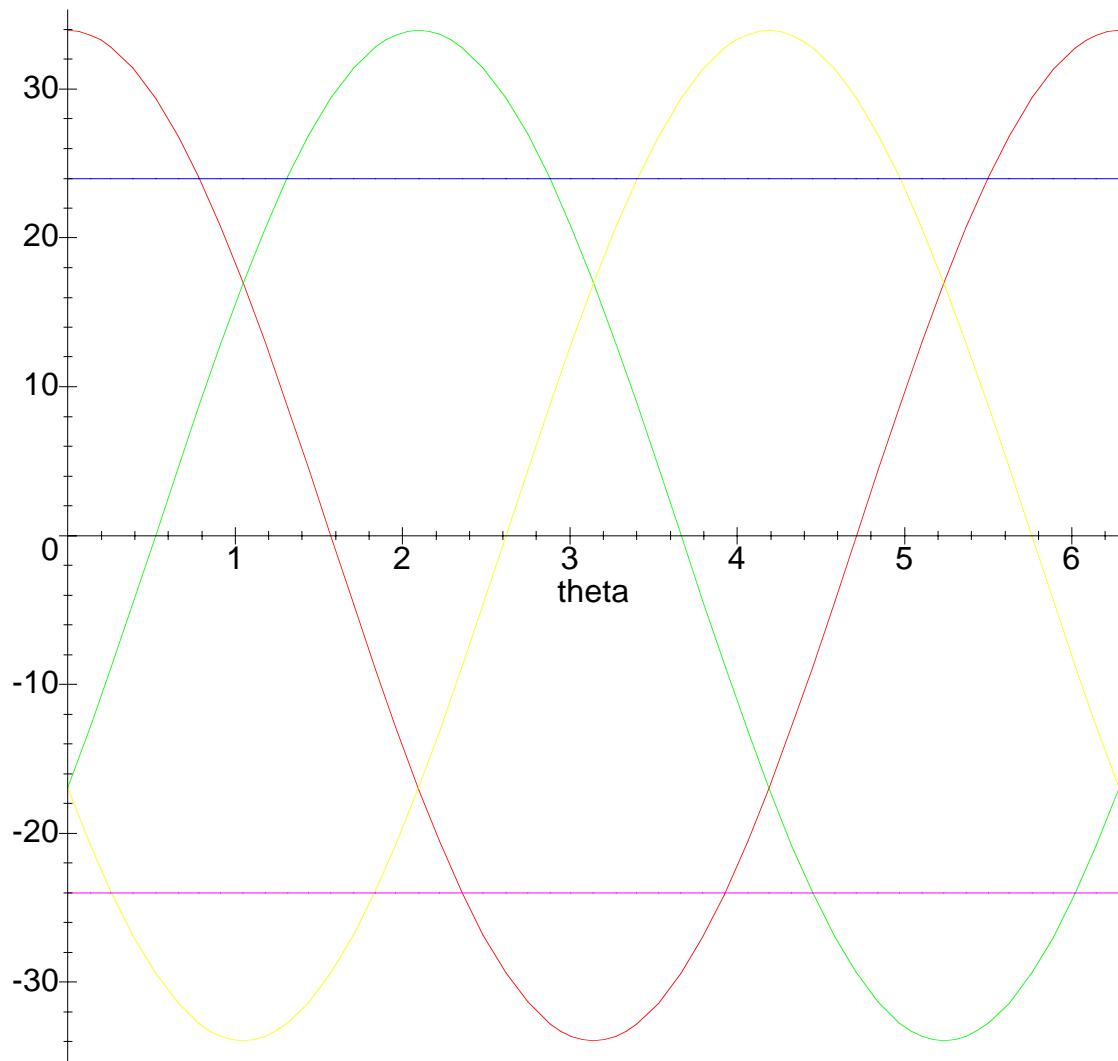
> evalf(Vdc/V13);
1.351663177
> Vdc/Vm;
1.655442544
> evalf(Vdc/Vm);
1.655442544
> VYdc:=1/(Pi/3)*int(V1**2,theta=0..Pi/3);
      
$$VYdc := \frac{2557.803998}{\pi}$$

> VYdc:=simplify(sqrt(VYdc));
      
$$VYdc := 28.53373967$$

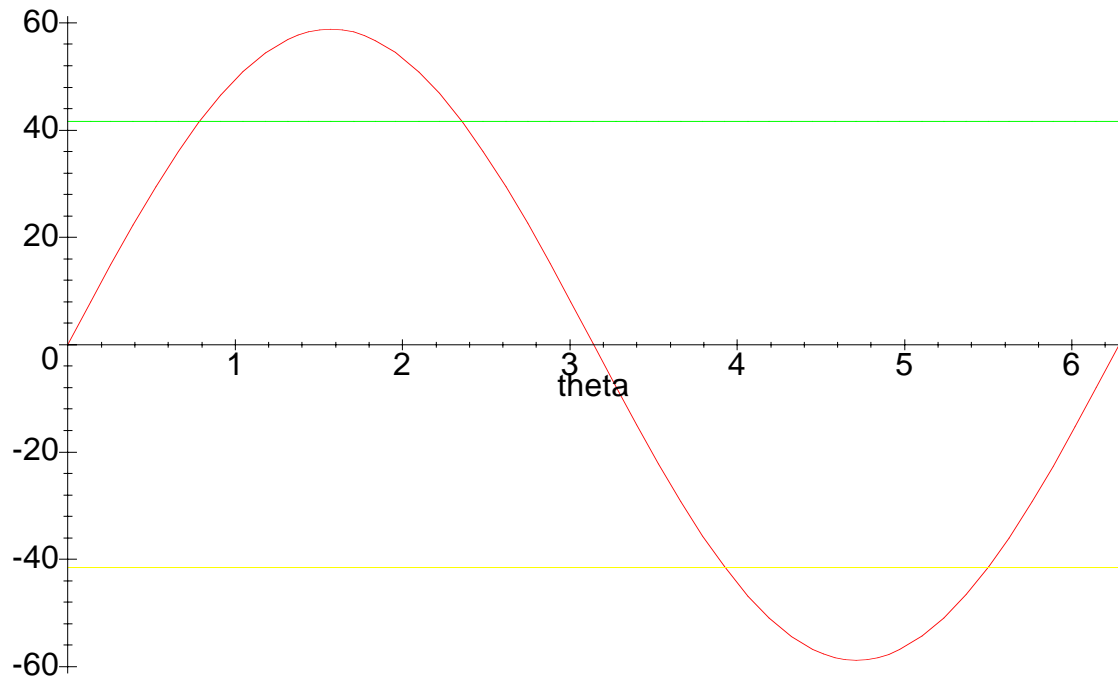
> evalf(VYdc);
28.53373967
> VYdc/V13;
.3872681952
      
$$\frac{.3872681952}{\sqrt{\frac{1}{\pi}}}$$

> evalf(VYdc/V13);
.6864150040
> VYdc/Vm;
.8406832557
> evalf(VYdc/Vm);
.8406832557
> VYYdc:=1/(Pi/6)*int(V1**2,theta=0..Pi/6);

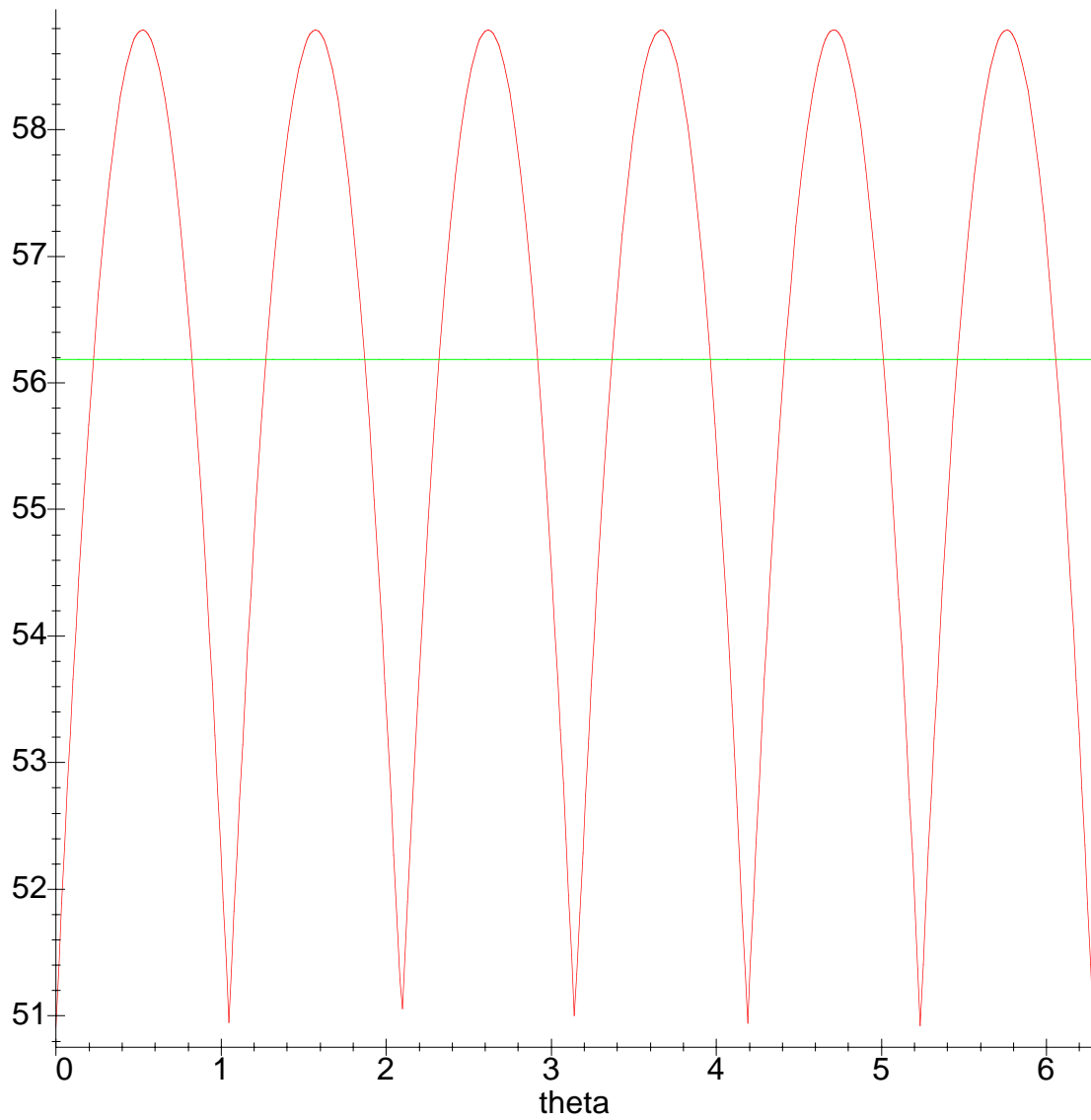
```

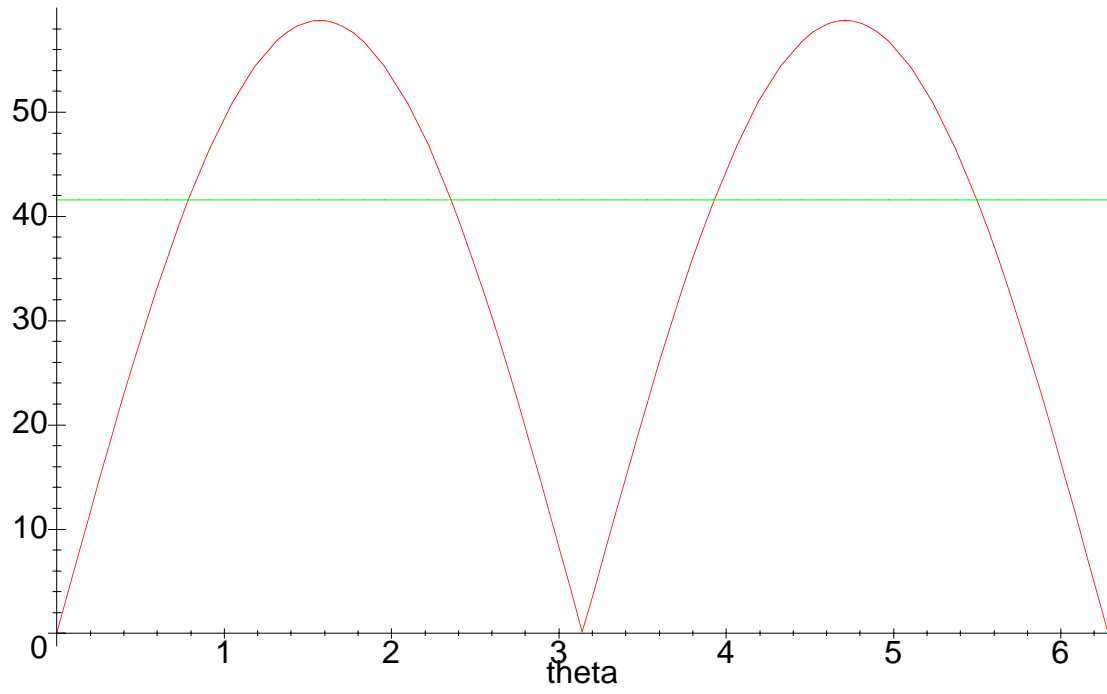
```
> plot([V2-V3,V13,-V13],theta=0..2*Pi);
```



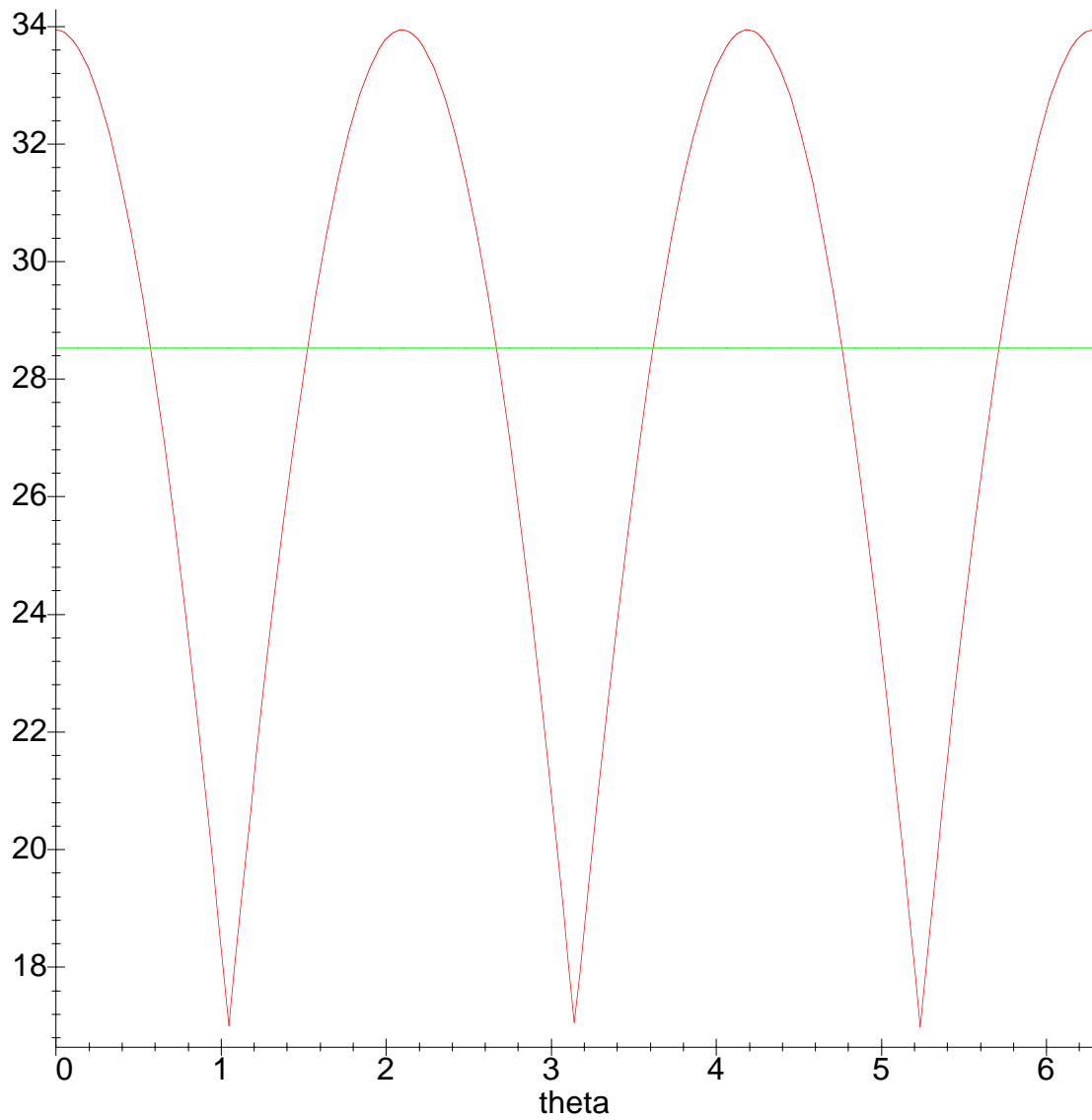
```
> plot([max(V1,V2,V3)-min(V1,V2,V3),Vdc],theta  
a=0..2*Pi);
```



```
> plot([abs(V2-V3),V13],theta=0..2*Pi);
```



```
> plot([max(V1,V2,V3),VYdc],theta=0..2*Pi);
```



```
> plot([max(abs(V1),abs(V2),abs(V3)),VYYdc],t  
heta=0..2*Pi);
```