

```
clc
clear all
close all
```

11.1.3

```
Y = (12*exp(j*deg2rad(-30)))/(sqrt(4+9)*exp(j*atan(3/2)));
Ymag = abs(Y)
```

```
Ymag = 3.3282
```

```
Yangle = rad2deg(angle(Y))
```

```
Yangle = -86.3099
```

11.4.3

```
syms n t
f1(t) = (2*t+4)*cos(n*pi*t/3);
f2(t) = (-2*t+4)*cos(n*pi*t/3);
an = 1/3*(int(f1,t,-2,0)+int(f2,t,0,2))
```

```
an =
```

$$\frac{24 \sin\left(\frac{\pi n}{3}\right)^2}{n^2 \pi^2}$$