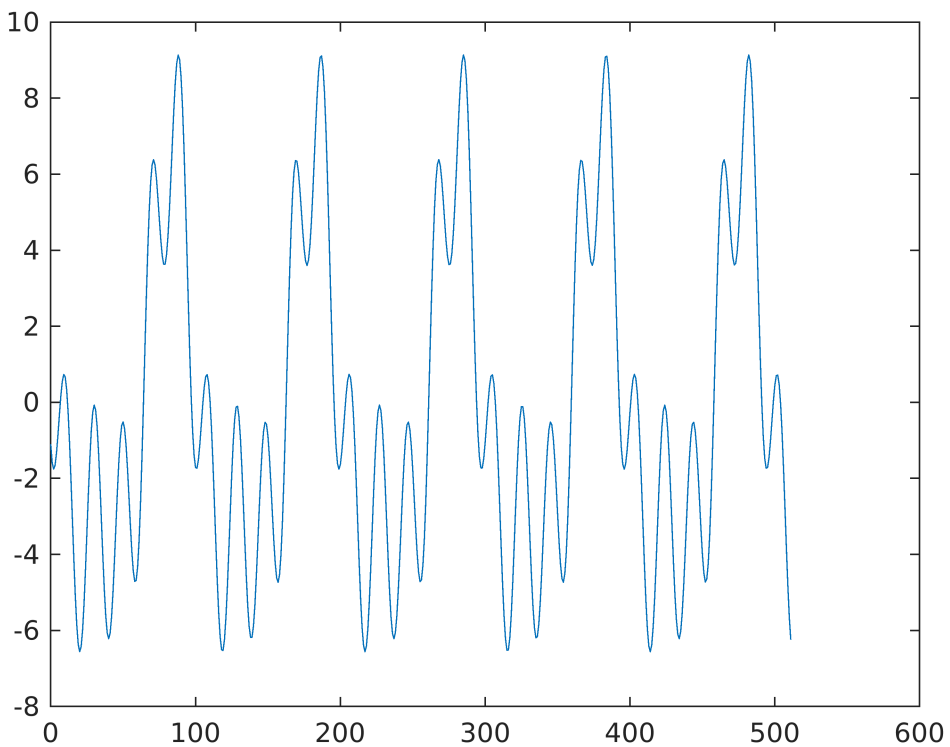


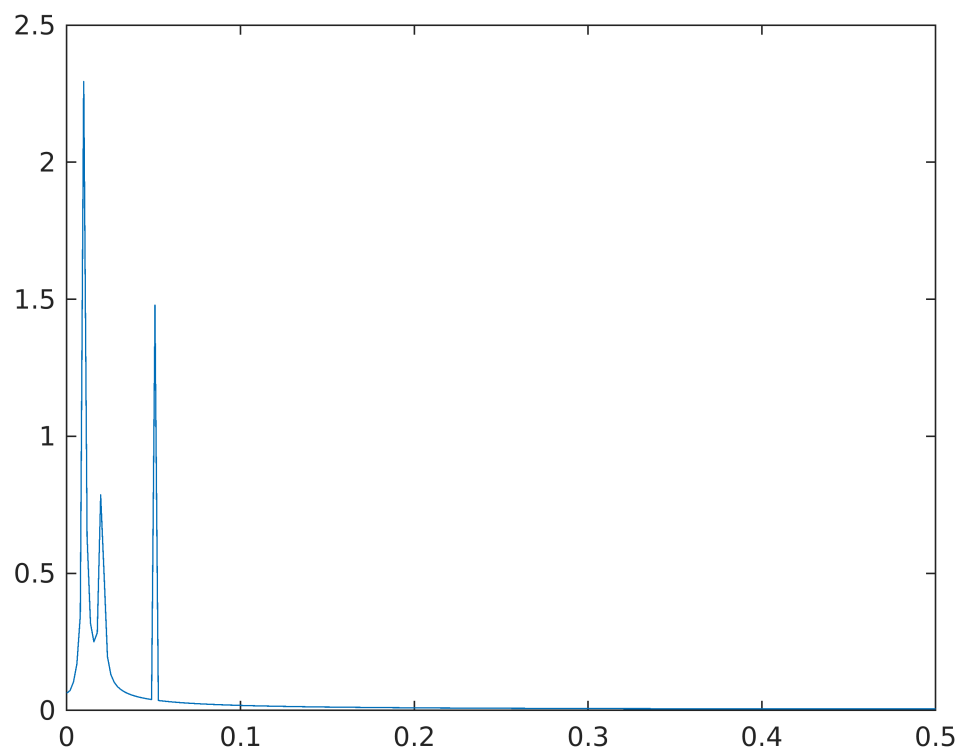
```
% R1.a)
M=512;
w0=5.2*2*pi/M;
samples=0:M-1;
for n=1:length(samples)
    x(n)=5*cos(w0*samples(n) +1)+ 2*cos(2*w0*samples(n) +2) +...
        3*cos(5*w0*samples(n) + 3);
end

% R1.b)
plot(samples,x);
```

Warning: MATLAB has disabled some advanced graphics rendering features by switching to software OpenGL. For more information, [click here](#).



```
% R1.c)
N=512;
dfourier=fft(x);
fs=1;
f=fs*(0:N/2)/N;
figure()
plot(f,abs(dfourier(1:512/2 +1))/512))
```



```
figure()  
plot(f,angle(dfourier(1:512/2 +1)/512))
```

