

DSP lab two

$y[n] = \cos(2\pi f_1 t) + 2 \sin(2\pi f_2 t) + 3 \cos(2\pi f_3 t);$

$f_1=4, f_2=20, f_3=35;$

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t=-30:30;
f1=4;
f2=20;
f3=35;
yn=y1+y2+y3;
y1=cos(2*pi*f1*t);
y2=2*sin(2*pi*f2*t);
y3=3*cos(2*pi*f3*t);
subplot(4,1,1)
plot(t,y1)
subplot(4,1,2)
plot(t,y2)
subplot(4,1,3)
plot(t,y3)
subplot(4,1,4)
plot(t,yn)

subplot(4,1,1)
title('y1=cos(2*pi*f1*t)')
```

