

```
>> %% ***** Q4 *****
syms t s;
m = pi/2
X_s = 1 / ((s+3-j*(m))*(s+3+j*(m))*(s));
x_t = ilaplace(X_s)
fplot(x_t,[0,5],'r','LineWidth',2); % Plot x(t) as a function plot
xlabel('Time (sec)');
ylabel('x(t)');
title('x(t) for 0<=t<=5');
ylim([0,0.1]) % assign limits to y axis
grid on;
```

m =

1.5708

x_t =

$$-4/((-6 + \pi i)(6 + \pi i)) - (\exp((t*(-6 + \pi i))/2)*2i)/(\pi*(-6 + \pi i)) - \checkmark$$
$$(\exp(-(t*(6 + \pi i))/2)*2i)/(\pi*(6 + \pi i))$$

>>