```matlab
clear all;
% Spencer Goulette
% 1/27/20
```

ECE414 HW01 Part 2

```matlab
syms s
%a)
    F = 1/(s*(s+1));
    ilaplace(F)

%b)
    F = 3/(s*(s^2+6*s+5));
    ilaplace(F)

%c)
    F = (3*s^2+6*s+6)/((s+1)*(s^2+6*s+10));
    ilaplace(F)

%d)
    F = (2*(s+3))/(s^2 + 16);
    ilaplace(F)

%e)
    F = (s+1)/s^2;
    ilaplace(F)

%f)
    F = (exp(-2*s))/(s*(s+3));
    ilaplace(F)
```

ans =

1 - exp(-t)

ans =

*(3*exp(-5*t))/20 - (3*exp(-t))/4 + 3/5*

ans =

*(3*exp(-t))/5 + (12*exp(-3*t)*(cos(t) - 3*sin(t)))/5*

ans =

*2*cos(4*t) + (3*sin(4*t))/2*

```
ans =

t + 1


ans =

-heaviside(t - 2)*(exp(6 - 3*t)/3 - 1/3)
```

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