Date

$$\begin{pmatrix} 0 & 5 \\ 15 & 3 \end{pmatrix}\begin{pmatrix} x_1 \\ x_2 \end{pmatrix} = \begin{pmatrix} 35 \\ 66 \end{pmatrix}$$

$0 \cdot x_1 + 5 \cdot x_2 = 35$ $\quad x_1 = 3$

$15 \cdot x_1 + 3 \cdot x_2 = 66$ $\quad x_2 = 7$

```
a = 4/3;                    eps/2 is represented
b = a-1;
c = b+b+b;
e = 1-c          ≠ 0        why?
```

```
a = 1 - eps/2;
b = 2*a;
c = b-2;
d = 2*c          = 0        why?
```

$(1 + eps/2) + eps/2 - 1$ is not equal to $1 + (eps/2 + eps/2) - 1$ — why?

```
f=0
for i = 1:20,
    f = f + 0.1;            is f=1 or?
    if f == 1,
        break;
    end;
end;
```

```
f=0
for i = 0:0.1:1
    f= f+0.1;
end;
```

does the loop ever end?

polynomial = infinite differentiable function whose degree'th derivative is constant

is $2(1-t)^2 + 2t(1-t)$ a polynomial? what is the degree?

is $1/\sqrt{2t}$ a polynomial?

is $\cos x$ a polynomial?