

COEN45 Spring 2010
Proper form in MATLAB scripts

Here is an example of how *not* to write a script (Sample problem 1-4, p. 26).

```
% Solution of Sample Problem 1-4
P=5000;  r=0.085;  ta=17;  n=12;
B=P*(1+r)^ta
t=log(B/P)/(n*log(1+r/n));
years=fix(t)
months=ceil((t-years)*12)
```

Here is a better way:

```
clear; close all
%
% Solution of Sample Problem 1-4
%
P=5000;  %% Principal ($)
r=0.085; %% Interest rate (8.5%)
ta=17;   %% Time (years)
n=12;    %% Number of compounding periods per year

B = P*(1+r)^ta;
t = log(B/P)/(n*log(1+r/n));
years = fix(t)
months = ceil((t-years)*12)
```

This is better because

- It starts by clearing the workspace and figures
- It has a little more space around the title
- Constants are identified, including units
- Spaces around = signs help readability

Please do your scripts this way!