

MATLAB EXERCISE 1.10 **Symbolic integration.** MATLAB supports operations with symbolic variables, that is, all kinds of calculations using symbols in place of real-valued (numerical) variables. Symbolic integration is implemented in MATLAB through function `int()`. Write your own function named `integral()` that invokes `int` and has the following input data [`integral(f,t,r,a,b)`] in order to compute the integral $\int_a^b f t \, dr$: `f` and `t` (their product represents the function to be integrated), `r` (independent variable of integration), and `a` and `b` (integration limits). (*integral.m on IR*)

SOLUTION:

```
%  
% Book: MATLAB-Based Electromagnetics (Pearson Prentice Hall)  
% Author: Branislav M. Notaros  
% Instructor Resources  
% (c) 2011  
%  
% This MATLAB code or any part of it may be used only for educational purposes  
% associated with the book  
%  
%  
%  
% Symbolic integration  
  
function val = integral(f,t,dr,a,b)  
val = int (f*t,dr,a,b);
```