

## Problem 23

In each of Problems 21 through 28:

- (a) Determine a suitable form for  $Y(t)$  if the method of undetermined coefficients is to be used.
- (b) Use a computer algebra system to find a particular solution of the given equation.

$$y'' - 5y' + 6y = e^t \cos 2t + e^{2t}(3t + 4) \sin t$$