

Problem 19

In each of Problems 9 through 20:

- (a) Find the solution of the given initial value problem in explicit form.
- (b) Plot the graph of the solution.
- (c) Determine (at least approximately) the interval in which the solution is defined.

$$\sin 2x \, dx + \cos 3y \, dy = 0, \quad y(\pi/2) = \pi/3$$