23. Both \( f(x, y) = y^{1/3} \) and \( \partial f/\partial y = (1/3)y^{-2/3} \) are continuous near \((0, 1)\), so the theorem guarantees the existence of a unique solution in some neighborhood of \( x = 0 \).

24. \( f(x, y) = y^{1/3} \) is continuous in a neighborhood of \((0, 0)\), but \( \partial f/\partial y = (1/3)y^{-2/3} \) is not, so the theorem guarantees existence but not uniqueness in some neighborhood of \( x = 0 \).

28. Neither \( f(x, y) = (x - 1)/y \) nor \( \partial f/\partial y = -(x - 1)/y^2 \) is continuous near \((1, 0)\), so the existence-uniqueness theorem guarantees nothing.

**Section 1.4**

4. \( y = C(1 + x)^4 \)

11. \( y = (C - x^2)^{-1/2} \)

20. \( y = \tan(x^3 + \pi\theta) \)

26. \( y = 1/(1 - x^2 - x^3) \)

30. About 3.87 hours