Even Solutions

2. linear

4. exact

6. exact

8. linear (in r)

10. exact, $y = \frac{C-3x}{x^2-1}$

12. exact, $e^x \sin(y) - x^2 + y^{1/3} = C$

14. exact, $e^t y - te^t + e^t + y = C$, or $y = \frac{C + te^t - e^t}{e^t + 1}$

16. See quiz # 3 solutions

18. exact, $x^2 + xy^2 - \sin(x + y) - e^y = C$

20. exact, $2 \arcsin(x) + \sin(xy) - \frac{3}{2} y^{2/3} = C$

22. See quiz # 3 solutions

24. $x(t) = \frac{e-t}{e^t - 1}$

26. $x \tan(y) - 2x + \ln|y| = 0$

28. (a) $N(x, y) = x \cos(xy) + C(y)$, (b) $N(x, y) = xe^{xy} - x^4 + C(y)$