

$$31. \begin{cases} 2 \ln |t| + c, & \text{se } n = 1 \\ \frac{t^{1-n}}{(n-1/2)(1-n)} + c, & \text{se } n \neq 1 \end{cases}$$

$$32. \frac{3}{5} x^{5/3} + \frac{x^2}{2} - \frac{1}{10}$$

$$33. 2x - \operatorname{sen} 2x$$

$$34. -\frac{1}{x} + x - \frac{3}{2}$$

$$35. \frac{\pi(\sqrt{2}-2)}{8}$$

$$36. \cos x + 1$$

## SEÇÃO 6.4

$$1. \frac{1}{22} (2x^2 + 2x - 3)^{11} + c \quad 2. \frac{7}{24} (x^3 - 2)^{8/7} + c \quad 3. \frac{5}{8} (x^2 - 1)^{4/5} + c$$

$$4. \frac{-5}{9} (4 - 3x^2)^{3/2} + c \quad 5. \frac{1}{6} (1 + 2x^2)^{3/2} + c \quad 6. \frac{3}{8} (e^{2t} + 2)^{4/3} + c$$

$$7. \ln(e^t + 4) + c$$

$$8. -e^{1/x} - \frac{2}{x} + c$$

$$9. \frac{\operatorname{tg}^2 x}{2} + c$$

$$10. \frac{\operatorname{sen}^5 x}{5} + c$$

$$11. \frac{1}{4} \sec^4 x + c$$

$$12. -2 \ln |\cos x| - 5x + c$$

$$13. \frac{1}{2} \operatorname{sen} 2e^x + c$$

$$14. \frac{1}{4} \operatorname{sen} x^2 + c$$

$$15. \frac{-1}{5} \cos(5\theta - \pi) + c$$

$$16. \frac{1}{4} (\operatorname{arc} \operatorname{sen} y)^2 + c$$

$$17. \frac{2}{b} \ln |a + b \operatorname{tg} \theta| + c$$

$$18. \frac{1}{4} \operatorname{arc} \operatorname{tg} \frac{x}{4} + c$$

$$19. \frac{1}{2-y} + c$$

$$20. \frac{3}{4} \operatorname{sen}^{4/3} \theta + c$$

$$21. (\ln x)^2 + c$$

$$22. \frac{\operatorname{senh} 2ax}{a} + 2x + c$$

$$23. \frac{1}{9} (3t^2 + 1)^{3/2} + c$$

$$24. \frac{2}{3} \operatorname{arc} \operatorname{tg} \frac{2(x+5/2)}{3} + c$$

$$25. \frac{-\sqrt{3}}{2} \ln \left| \frac{x + \sqrt{3} - 2}{\sqrt{3} + 2 - x} \right| + c$$

$$26. \frac{1}{4} \operatorname{arc} \operatorname{tg} \frac{e^x}{4} + c$$

$$27. 2\sqrt{x+3} - 2 \ln \left| \frac{2 + \sqrt{x+3}}{2 - \sqrt{x+3}} \right| + c$$

$$28. \frac{-3}{\ln 3x} + c$$

29.  $\frac{-1}{4} \cos 4x + x + c$       30.  $\frac{2^{x^2}}{\ln 2} + c$       31.  $\frac{1}{6} e^{3x^2} + c$
32.  $\frac{-1}{2+t} + c$       33.  $\ln |\ln t| + c$       34.  $\frac{-4}{3} (1 - 2x^2)^{3/2} + c$
35.  $\frac{1}{12} (e^{2x} + 2)^6 + c$       36.  $\sqrt{4t^2 + 5} + c$       37.  $-\ln |3 - \sin x| + c$
38.  $\frac{-1}{2(1+\sqrt{v})^4} + c$       39.  $\frac{2}{7} (1+x)^3 \sqrt{1+x} - \frac{4}{5} (1+x)^2 \sqrt{1+x} + \frac{2}{3} (1+x) \sqrt{1+x} + c$
40.  $\frac{-1}{5} e^{-x^5} + c$       41.  $\frac{1}{2} \sin t^2 + c$       42.  $\frac{8}{27} (6x^3 + 5)^{3/2} + c$
43.  $\frac{1}{3} (\sin 2\theta)^{3/2} + c$       44.  $\frac{1}{5} \operatorname{tg} (5x + 3) + c$       45.  $\frac{-1}{2(5 - \cos \theta)^2} + c$
46.  $\ln |\sin u| + c$       47.  $-\frac{2}{5a} (1 + e^{-at})^{5/2} + c$       48.  $2 \sin \sqrt{x} + c$
49.  $\frac{2}{5} (t - 4)^2 \sqrt{t - 4} + \frac{8}{3} (t - 4) \sqrt{t - 4} + c$       50.  $\frac{-1}{6} \cos 2x^3 + x^4 + c$

## SEÇÃO 6.6

1.  $\frac{-x}{5} \cos 5x + \frac{1}{25} \sin 5x + c$       2.  $(x-1) \ln (1-x) - x + c$
3.  $\frac{e^{4t}}{4} \left( t - \frac{1}{4} \right) + c$       4.  $\frac{(x+1)}{2} \sin 2x + \frac{1}{4} \cos 2x + c$
5.  $\frac{x^2}{2} \left[ \ln 3x - \frac{1}{2} \right] + c$       6.  $\cos^2 x \sin x + \frac{2 \sin^3 x}{3} + c$
7.  $\frac{2}{5} e^x \left[ \sin \frac{x}{2} + 2 \cos \frac{x}{2} \right] + c$       8.  $\frac{2}{3} x \sqrt{x} \ln x - \frac{4}{9} x \sqrt{x} + c$