Solutions:

1. $\dfrac{3x^5}{5}+\dfrac{2x^4}{4}+5x+k$
2. $\dfrac{x^{\frac{5}{3}}}{\left(\frac{5}{3}\right)}+\cos x+k$
3. $\dfrac{x^3}{3}-\dfrac{1}{2}\ln|x|+k$
4. $\dfrac{1}{2}\ln|3+4x|+k$
5. $2x+5\ln|x-2|+k$
6. $\dfrac{(2x+1)^{\frac{5}{4}}}{\left(\frac{5}{4}\right)(2)}+k$
7. $-\dfrac{1}{2}\cos 2x+k$
8. $\dfrac{1}{2}\sin(2x-5)+k$
9. $-3\sin\left(1-\dfrac{1}{3}x\right)+k$
10. $-\dfrac{1}{2}\cos 2x+2\sin\left(\dfrac{1}{2}x\right)+k$
11. $\sec x+k$
12. $\dfrac{1}{2}\mathrm{e}^{3x}+k$
13. $-\dfrac{1}{5}\mathrm{e}^{2-5x}+k$
14. $\dfrac{1}{\mathrm{e}}\mathrm{e}^{\mathrm{e}x}+k$
15. $\dfrac{x^{\mathrm{e}+1}}{\mathrm{e}+1}+k$
16. $x-\dfrac{1}{2}\cos 2x+k$
17. $-\ln|\cos x|+k$
18. $\dfrac{1}{4}\ln|\sin 4x|+k$
19. $\dfrac{x^{\frac{3}{2}}}{\frac{3}{2}}-\dfrac{1}{2}\cot 2x-x+k$
20. $\mathrm{e}^5x-\dfrac{1}{2}\ln|\sin x|+k$
21. $\dfrac{1}{\ln 2}2^x+k$
22. $\dfrac{2}{\pi}\left(\dfrac{x^2}{2}\right)+k$
23. $\dfrac{1}{2}\sin\left(2x^2+1\right)$
24. $\dfrac{1}{2}\mathrm{e}^{x^2}$
25. $-\dfrac{1}{2}\ln|\operatorname{cosec}x^2+\cot x^2|+k$
26. $2\ln|\cos 2x|+k$
27. $2\left(\dfrac{1}{2}\tan 2x-x\right)+k$
28. $\dfrac{1}{2}\left(x-\dfrac{1}{2}\sin 2x\right)+k$
29. $\dfrac{1}{2}\left(x+\dfrac{1}{2}\sin 2x\right)+k$
30. $x+\dfrac{3}{4}\sin\left(\dfrac{4}{3}x\right)+x^2+k$
31. $-\cot x-x+k$
32. $\dfrac{1}{4}\ln\left(3+4x^2\right)+k$
33. $\dfrac{1}{2}\left(\ln|1+x|-ln|1-x|\right)+k$
34. $\dfrac{x^{-1}}{-1}-\cot x+k$
35. $\dfrac{1}{2}x-\dfrac{1}{4}\sin 2x-\cot x+2x+k$
36. $\dfrac{1}{2}\left(x+\dfrac{1}{4}\sin 4x\right)+k$
37. $-\cos x+\dfrac{\cos^3 x}{3}+k$
38. $\dfrac{1}{2}\sin 2x-\dfrac{1}{2}\left(\dfrac{\sin^3 2x}{3}\right)+k$
39. $-\dfrac{2}{3}\cot\left(\dfrac{3}{2}x\right)-x+k$
40. $-\dfrac{\cos^4 x}{4}+k$
41. $\dfrac{1}{3}\ln|3x^3+6x|+k$

42. $-\frac{1}{5}\mathrm{e}^{-5x+6}+k$

43. $\frac{1}{\ln 100}100^{x}+k$

44. $\frac{1}{(-1)(\ln 10)}10^{2-x}+k$

45. $\ln|\sin x-\cos x|+k$

46. $\frac{\sin^{100}x}{100}+k$

47. $\frac{\operatorname{cosec}^{100}(1-x)}{100}+k$

48. $-\frac{1}{2}\cot 2x-x+\left(2\tan\left(\frac{1}{2}x\right)-x\right)+k$

49. $\tan x-\sec x+k$

50. $-\ln|\operatorname{cosec}x+\cot x|+k$