

1. $\int \frac{x \, dx}{(x+1)(x+2)(x+3)};$
2. $\int \frac{x^{10}dx}{x^2+x-2};$
3. $\int \frac{x \, dx}{x^3-3x+2};$
4. $\int \frac{x^4dx}{x^4+5x^2+4};$
5. $\int \left(\frac{x}{x^2-3x+2} \right)^2 dx;$

6. $\int \frac{dx}{(x+1)(x+2)^2(x+3)^3};$
7. $\int \frac{dx}{x^5+x^4-2x^3-2x^2+x+1};$
8. $\int \frac{x^2+5x+4}{x^4+5x^2+4} dx;$
9. $\int \frac{xdx}{(x-1)^2(x^2+2x+2)};$
10. $\int \frac{dx}{x(1+x)(1+x+x^2)};$

11. $\int \frac{dx}{1+x^3};$
12. $\int \frac{xdx}{x^3-1};$
13. $\int \frac{dx}{x^4-1};$
14. $\int \frac{dx}{x^4+1};$
15. $\int \frac{dx}{(1+x)(1+x^2)(1+x^3)};$

16. $\int \frac{dx}{x^5-x^4+x^3-x^2+x-1};$
17. $\int \frac{dx}{x^4+3x^3+\frac{9}{2}x^2+3x+1};$
18. $\int \frac{dx}{x^4+2x^3+3x^2+2x+1};$
19. $\int \frac{dx}{x^4+2x^3+3x^2+2x+1};$
20. $\int \frac{(x^4+1)}{x^6+1} dx;$

21. $\int \frac{dx}{x^2(x^2+1)};$
22. $\int \frac{xdx}{(x-1)^2(x+1)^2};$
23. $\int \frac{dx}{(x^2+1)^3};$
24. $\int \frac{dx}{(x^4+1)^2};$
25. $\int \frac{dx}{(x^3+1)^2};$

26. $\int \frac{x^2dx}{(x^2+2x+2)^2};$
27. $\int \frac{x^2+3x-2}{(x-1)(x^2+x+1)^2} dx;$
28. $\int \frac{dx}{(x^4-1)^2};$
29. $\int \frac{x^2+1}{(x^4+x^2+1)^2} dx;$
30. $\int \frac{dx}{(x^3+x+1)^3};$

31. $\int \frac{x^2-1}{x^4+x^3+x^2+x+1} dx$
32. $\int \frac{1-x^7}{x(1+x^7)} dx;$
33. $\int \frac{x^{2n-1}}{x^n+1} dx;$
34. $\int \frac{x^{3n-1}}{(x^{2n}+1)^2} dx;$
35. $\int \frac{dx}{x(x^{10}+2)};$

36. $\int \frac{x^4}{(x^{10}-10)^2} dx;$
37. $\int \frac{x^2+1}{x^4+x^3+1} dx;$
38. $\int \frac{2+x}{1+x} dx;$
39. $I_n = \int \frac{dx}{(ax^2+bx+c)^n}, \quad I_3=?;$
40. $\int \frac{dx}{1+x^{2n}};$

41. $\int \frac{1-x+x^2}{\sqrt{1+x-x^2}} dx;$
42. $\int \frac{dx}{(1+x)\sqrt{1+x+x^2}};$
43. $\int \frac{x dx}{(x-1)^2 \sqrt{1+2x-x^2}};$
44. $\int \frac{x dx}{(x^2-1)\sqrt{x^2-x-1}};$
45. $\int \frac{x^2+x+1}{(x+1)^2} dx;$
46. $\int \frac{\sqrt{x+1}-\sqrt{x-1}}{\sqrt{x+1}+\sqrt{x-1}} dx;$
47. $\int \frac{x dx}{\sqrt[4]{x^3(a-x)}}, \quad a > 0;$
48. $\int \frac{dx}{\sqrt[n]{(x-a)^{n+1}(x-b)^{n-1}}};$
49. $\int \frac{dx}{1+\sqrt{x}+\sqrt{1+x}};$
50. $\int \frac{x dx}{(1+x)\sqrt{1-x-x^2}};$
51. $\int \frac{x^3 dx}{(1+x)\sqrt{1+2x-x^2}};$
52. $\int \frac{dx}{(1+x^2)\sqrt{1-x^2}};$
53. $\int \frac{dx}{(1-x^4)\sqrt{1+x^2}};$
54. $\int \frac{\sqrt{x^2+2}}{(1+x^2)};$
55. $\int \frac{dx}{(x^2+x+1)\sqrt{x^2+x-1}};$
56. $\int \frac{x^2 dx}{(4-2x+x^2)\sqrt{2+2x-x^2}};$
57. $\int \frac{(x+1) dx}{(x^2+x+1)\sqrt{x^2+x+1}};$
58. $\int \frac{dx}{(x^2-x+1)\sqrt{x^2+x+1}};$
59. $\int \frac{dx}{x+\sqrt{x^2+x+1}};$
60. $\int \frac{dx}{1+\sqrt{1-2x-x^2}};$
61. $\int x \sqrt{x^2-2x+2} dx;$
62. $\int \frac{x-\sqrt{x^2+3x+2}}{x+\sqrt{x^2+3x+2}} dx;$
63. $\int \frac{dx}{(1+\sqrt{x(1+x)})^2};$
64. $\int \frac{dx}{\sqrt{x^2+1}-\sqrt{x^2-1}};$
65. $\int \frac{dx}{\sqrt{2}+\sqrt{1-x}+\sqrt{1+x}};$
66. $\int \frac{\sqrt{x(1+x)}}{\sqrt{x}+\sqrt{x+1}} dx;$
67. $\int \frac{x+\sqrt{x^2+x+1}}{1+x+\sqrt{x^2+x+1}} dx;$
68. $\int \frac{(x^2-1) dx}{(x^2+1)\sqrt{x^4+1}};$
69. $\int \frac{(x^2+1) dx}{x\sqrt{x^4+x^2+1}};$
70. $\int \frac{x dx}{(1-x^3)\sqrt{1-x^2}};$
71. $\int \frac{\sin x - \cos x}{\sin x + 2\cos x} dx;$
72. $\int \frac{\sin x}{\sin x - 3\cos x} dx;$
73. $\int \frac{a\sin x + b\cos x}{c\sin x + d\cos x} dx$
74. $\int \frac{\sin x + 2\cos x - 3}{\sin x - 2\cos x + 3} dx$
75. $\int \frac{\sin x}{\sqrt{2} + \sin x + \cos x} dx$
76. $\int \frac{2\sin x + \cos x}{3\sin x + 4\cos x - 2} dx$
77. $\int \frac{\sin^2 x - 4\sin x \cos x + 3\cos^2 x}{\sin x + \cos x} dx$
78. $\int \frac{\sin^2 x - \sin x \cos x + 2\cos^2 x}{\sin x + 2\cos x} dx;$
79. $\int \frac{\sin x + \cos x}{2\sin^2 x - 4\sin x \cos x + 5\cos^2 x} dx;$
80. $\int \frac{\sin x - 2\cos x}{1 + 4\sin x \cos x} dx;$

81.
$$\int \frac{\sqrt{x+1} + 2}{(x+1)^2 - \sqrt{x+1}} dx;$$

82.
$$\int \frac{dx}{\sqrt[3]{(x-1)(x+1)^2}};$$

83.
$$\int \frac{\sqrt[3]{1+\sqrt[4]{x}}}{\sqrt{x}} dx;$$

84.
$$\int \frac{dx}{\sqrt[4]{1+x^4}};$$

85.
$$\int \frac{dx}{x\sqrt[3]{1+x^5}};$$

86.
$$H_m = \int \frac{x^m}{\sqrt{1-x^2}} dx, \quad m \in Z;$$

87.
$$H_m = \int \frac{x^m}{\sqrt{x^2-1}} dx, \quad m \in Z;$$

88.
$$H_m = \int \frac{x^m}{\sqrt{x^2+1}} dx, \quad m \in Z;$$

89.
$$I_{n+1} = \int \frac{dx}{(x^2+a^2)^{n+1}}, \quad n \in Z;$$

90.
$$I_{n+1} = \int \frac{dx}{(x^2-a^2)^{n+1}}, \quad n \in Z;$$

91.
$$\int \frac{x^3-x+1}{\sqrt{x^2+2x+2}} dx;$$

92.
$$\int \frac{dx}{(x-1)^3 \sqrt{x^2-2x-1}};$$

93.
$$\int \frac{dx}{(2x^2-x+2)^{7/2}};$$

94.
$$\int \frac{\cos^2 x}{1+\cos^2 x} dx;$$

95.
$$\int \frac{1}{\sin^4 x + \cos^4 x} dx;$$

96.
$$\int \frac{1+\operatorname{tg}^2 x}{(4+\operatorname{tg}^2 x)\operatorname{tg}^3 x} dx;$$

97.
$$\int \frac{2 \sin x + \cos x}{(2 \cos x - 3 \sin x)^2} dx;$$

98.
$$\int \frac{\cos(2x)}{\sin^4 x + \cos^4 x} dx;$$

99.
$$\int \frac{\cos^2(2x)}{\sin^4 x + \cos^4 x} dx;$$

100.
$$\int \frac{1+3 \sin^2 x + 2 \sin x \cos x}{\sin x - 2 \cos x} dx;$$