

$$1.1. \int (4-3x)e^{-3x} dx. \quad \text{BOXMATH.VN}$$

$$1.2. \int \operatorname{arctg} \sqrt{4x-1} dx.$$

$$1.3. \int (3x+4)e^{3x} dx.$$

$$1.4. \int (4x-2)\cos 2x dx.$$

$$1.5. \int (4-16x)\sin 4x dx.$$

$$1.6. \int (5x-2)e^{3x} dx.$$

$$1.7. \int (1-6x)e^{2x} dx.$$

$$1.8. \int \ln(x^2+4) dx.$$

$$1.9. \int \ln(4x^2+1) dx.$$

$$1.10. \int (2-4x)\sin 2x dx.$$

$$1.11. \int \operatorname{arctg} \sqrt{6x-1} dx. \quad \text{BOXMATH.VN}$$

$$1.12. \int e^{-2x}(4x-3) dx.$$

$$1.13. \int e^{-3x}(2-9x) dx.$$

$$1.14. \int \operatorname{arctg} \sqrt{2x-1} dx.$$

$$1.15. \int \operatorname{arctg} \sqrt{3x-1} dx.$$

$$1.16. \int \operatorname{arctg} \sqrt{5x-1} dx.$$

$$1.17. \int (5x+6)\cos 2x dx.$$

$$1.18. \int (3x-2)\cos 5x dx.$$

$$1.19. \int (x\sqrt{2}-3)\cos 2x dx.$$

$$1.20. \int (4x+7)\cos 3x dx.$$

$$1.21. \int (2x-5)\cos 4x dx$$

$$1.22. \int (8-3x)\cos 5x dx.$$

$$1.23. \int (x+5)\sin 3x dx. \quad \text{BOXMATH.VN}$$

$$1.24. \int (2-3x)\sin 2x dx.$$

$$1.25. \int (4x+3)\sin 5x dx.$$

$$1.26. \int (7x-10)\sin 4x dx.$$

$$1.27. \int (\sqrt{2}-8x)\sin 3x dx.$$

$$1.28. \int \frac{x dx}{\cos^2 x}.$$

$$1.29. \int \frac{x dx}{\sin^2 x}. \quad \text{BOXMATH.VN}$$

$$30. \int x \sin^2 x dx.$$

$$1.31. \int \frac{x \cos x dx}{\sin^3 x}.$$

$$2.1. \int_{-2}^0 (x^2 + 5x + 6) \cos 2x dx.$$

$$2.2. \int_{-2}^0 (x^2 - 4) \cos 3x dx.$$

$$2.3. \int_{-1}^0 (x^2 + 4x + 3) \cos x dx.$$

$$2.4. \int_{-2}^0 (x + 2)^2 \cos 3x dx.$$

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$$2.5. \int_{-4}^0 (x^2 + 7x + 12) \cos x dx.$$

$$2.6. \int_0^{\pi} (2x^2 + 4x + 7) \cos 2x dx.$$

$$2.7. \int_0^{\pi} (9x^2 + 9x + 11) \cos 3x dx.$$

$$2.8. \int_0^{\pi} (8x^2 + 16x + 17) \cos 4x dx.$$

$$2.9. \int_0^{2\pi} (3x^2 + 5) \cos 2x dx.$$

$$2.10. \int_0^{2\pi} (2x^2 - 15) \cos 3x dx.$$

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$$2.11. \int_0^{2\pi} (3 - 7x^2) \cos 2x dx.$$

$$2.12. \int_0^{2\pi} (1 - 8x^2) \cos 4x dx.$$

$$2.13. \int_{-1}^0 (x^2 + 2x + 1) \sin 3x dx.$$

$$2.14. \int_0^3 (x^2 - 3x) \sin 2x dx.$$

$$2.15. \int_0^{\pi} (x^2 - 3x + 2) \sin x dx.$$

$$2.16. \int_0^{\frac{\pi}{2}} (x^2 - 5x + 6) \sin 3x dx.$$

$$2.17. \int_{-3}^0 (x^2 + 6x + 9) \sin 2x dx.$$

$$2.18. \int_0^{\frac{\pi}{4}} (x^2 + 17,5) \sin 2x dx.$$

$$2.19. \int_0^{\frac{\pi}{2}} (1 - 5x^2) \sin x dx.$$

$$2.20. \int_{\frac{\pi}{4}}^3 (3x - x^2) \sin 2x dx.$$

$$2.21. \int_1^2 x \ln^2 x dx.$$

$$2.22. \int_1^{e^2} \frac{\ln^2 x dx}{\sqrt{x}}.$$

$$2.23. \int_1^8 \frac{\ln^2 x dx}{\sqrt[3]{x^2}}.$$

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$$2.24. \int_0^1 (x+1) \ln^2 (x+1) dx.$$

$$2.25. \int_2^3 (x-1)^3 \ln^2 (x-1) dx.$$

$$2.26. \int_{-1}^0 (x+2)^3 \ln^2 (x+2) dx.$$

$$2.27. \int_0^2 (x+1)^2 \ln^2 (x+1) dx.$$

$$2.28. \int_1^e \sqrt{x} \ln^2 x dx.$$

$$2.29. \int_{-1}^1 x^2 e^{-\frac{x}{2}} dx.$$

$$2.30. \int_0^1 x^2 e^{3x} dx.$$

$$2.31. \int_{-2}^0 (x^2 + 2) e^{\frac{x}{2}} dx.$$

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$$3.1. \int \frac{dx}{x\sqrt{x^2+1}}.$$

$$3.2. \int \frac{1+\ln x}{x} dx.$$

$$3.3. \int \frac{dx}{x\sqrt{x^2-1}}.$$

$$3.4. \int \frac{x^2 + \ln x^2}{x} dx.$$

$$3.5. \int \frac{xdx}{\sqrt{x^4+x^2+1}}.$$

$$3.6. \int \frac{(\arccos x)^3 - 1}{\sqrt{1-x^2}} dx.$$

$$3.7. \int \operatorname{tg} x \ln \cos x dx.$$

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$$3.8. \int \frac{\operatorname{tg}(x+1)}{\cos^2(x+1)} dx.$$

$$3.9. \int \frac{x^3}{(x^2+1)^2} dx.$$

$$3.10. \int \frac{1-\cos x}{(x-\sin x)^2} dx.$$

$$3.11. \int \frac{\sin x - \cos x}{(\cos x + \sin x)^5} dx.$$

$$3.12. \int \frac{x \cos x + \sin x}{(x \sin x)^2} dx.$$

$$3.13. \int \frac{x^3 + x}{x^4 + 1} dx.$$

$$3.14. \int \frac{x dx}{\sqrt{x^4 - x^2 - 1}}.$$

$$3.15. \int \frac{x dx}{\sqrt[3]{x-1}}.$$

$$3.16. \int \frac{1 + \ln(x-1)}{x-1} dx.$$

$$3.17. \int \frac{(x^2 + 1) dx}{(x^3 + 3x + 1)^5}.$$

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$$3.18. \int \frac{4 \operatorname{arctg} x - x}{1 + x^2} dx.$$

$$3.19. \int \frac{x^3}{x^2 + 4} dx.$$

$$3.20. \int \frac{x + \cos x}{x^2 + 2 \sin x} dx.$$

$$3.21. \int \frac{2 \cos x + 3 \sin x}{(2 \sin x - 3 \cos x)^3} dx.$$

$$3.22. \int \frac{8x - \operatorname{arctg} 2x}{1 + 4x^2} dx.$$

$$3.23. \int \frac{1/(2\sqrt{x}) + 1}{(\sqrt{x} + x)^2} dx.$$

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$$3.24. \int \frac{x}{x^4 + 1} dx.$$

$$3.25. \int \frac{x + 1/x}{\sqrt{x^2 + 1}} dx.$$

$$3.26. \int \frac{x - 1/x}{\sqrt{x^2 + 1}} dx.$$

$$3.27. \int \frac{\operatorname{arctg} x + x}{1 + x^2} dx.$$

$$3.28. \int \frac{x - (\operatorname{arctg} x)^4}{1 + x^2} dx.$$

$$3.29. \int \frac{x^3}{x^2 + 1} dx.$$

$$3.30. \int \frac{(\arcsin x)^2 + 1}{\sqrt{1 - x^2}} dx.$$

$$3.31. \int \frac{1 - \sqrt{x}}{\sqrt{x}(x+1)} dx.$$

$$4.1. \int_{e+1}^{e^2+1} \frac{1 + \ln(x-1)}{x-1} dx.$$

$$4.2. \int_0^1 \frac{(x^2 + 1) dx}{(x^3 + 3x + 1)^2}.$$

$$4.3. \int_0^1 \frac{4 \operatorname{arctg} x - x}{1 + x^2} dx.$$

$$4.4. \int_0^2 \frac{x^3 dx}{x^2 + 4}.$$

$$4.5. \int_{\pi}^{2\pi} \frac{x + \cos x}{x^2 + 2 \sin x} dx.$$

$$4.6. \int_0^{\pi/4} \frac{2 \cos x + 3 \sin x}{(2 \sin x - 3 \cos x)^3} dx.$$

$$4.7. \int_0^{1/2} \frac{8x - \operatorname{arctg} 2x}{1 + 4x^2} dx.$$

$$4.8. \int_1^4 \frac{1 / (2\sqrt{x}) + 1}{(\sqrt{x} + x)^2} dx.$$

$$4.9. \int_0^1 \frac{x dx}{x^4 + 1}.$$

$$4.10. \int_{\sqrt{3}}^{\sqrt{8}} \frac{x + 1/x}{\sqrt{x^2 + 1}} dx.$$

$$4.11. \int_{\sqrt{3}}^{\sqrt{8}} \frac{x - 1/x}{\sqrt{x^2 + 1}} dx.$$

$$4.12. \int_0^{\sqrt{3}} \frac{\operatorname{arctg} x + x}{1 + x^2} dx.$$

$$4.13. \int_0^{\sqrt{3}} \frac{x - (\operatorname{arctg} x)^4}{1 + x^2} dx.$$

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$$4.14. \int_0^1 \frac{x^3}{x^2 + 1} dx.$$

$$4.15. \int_0^{\sin 1} \frac{(\arcsin x)^2 + 1}{\sqrt{1 - x^2}} dx.$$

$$4.16. \int_1^3 \frac{1 - \sqrt{x}}{\sqrt{x}(x + 1)} dx.$$

$$4.17. \int_{\sqrt{3}}^{\sqrt{8}} \frac{dx}{x\sqrt{x^2 + 1}}.$$

$$4.18. \int_1^e \frac{1 + \ln x}{x} dx.$$

$$4.19. \int_{\sqrt{2}}^2 \frac{dx}{x\sqrt{x^2 - 1}}.$$

$$4.20. \int_1^e \frac{x^2 + \ln x^2}{x} dx.$$

$$4.21. \int_0^1 \frac{x dx}{\sqrt{x^4 + x^2 + 1}}.$$

$$4.22. \int_0^1 \frac{x^3 dx}{(x^2 + 1)^2}.$$

$$4.23. \int_0^{\pi/4} \operatorname{tg} x \ln \cos x dx.$$

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$$4.24. \int_{-1}^0 \frac{\operatorname{tg}(x+1)}{\cos^2(x+1)} dx.$$

$$4.25. \int_0^{1/\sqrt{2}} \frac{(\arccos x)^3 - 1}{\sqrt{1-x^2}} dx.$$

$$4.26. \int_{\pi}^{2\pi} \frac{1 - \cos x}{(x - \sin x)^2} dx.$$

$$4.27. \int_0^{\pi/4} \frac{\sin x - \cos x}{(\cos x + \sin x)^5} dx.$$

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$$4.28. \int_{\pi/4}^{\pi/2} \frac{x \cos x + \sin x}{(x \sin x)^2} dx.$$

$$4.29. \int_0^1 \frac{x^3 + x}{x^4 + 1} dx.$$

$$4.30. \int_{\sqrt{2}}^{\sqrt{3}} \frac{x dx}{\sqrt{x^4 - x^2 - 1}}.$$

$$4.31. \int_2^9 \frac{x dx}{\sqrt[3]{x-1}}.$$

$$5.1. \int \frac{x^3 + 1}{x^2 - x} dx.$$

$$5.2. \int \frac{3x^3 + 1}{x^2 - 1} dx.$$

$$5.3. \int \frac{x^3 - 17}{x^2 - 4x + 3} dx.$$

$$5.4. \int \frac{2x^3 + 5}{x^2 - x - 2} dx.$$

$$5.5. \int \frac{2x^3 - 1}{x^2 + x - 6} dx.$$

$$5.6. \int \frac{3x^3 + 25}{x^2 + 3x + 2} dx.$$

$$5.7. \int \frac{x^3 + 2x^2 + 3}{(x-1)(x-2)(x-3)} dx.$$

$$5.8. \int \frac{3x^3 + 2x^2 + 1}{(x+2)(x-2)(x-1)} dx.$$

$$5.9. \int \frac{x^3}{(x-1)(x+1)(x+2)} dx.$$

$$5.10. \int \frac{x^3 - 3x^2 - 12}{(x-4)(x-3)(x-2)} dx.$$

$$5.11. \int \frac{x^3 - 3x^2 - 12}{(x-4)(x-3)x} dx.$$

$$5.12. \int \frac{4x^3 + x^2 + 2}{x(x-1)(x-2)} dx.$$

$$5.13. \int \frac{3x^3 - 2}{x^3 - x} dx. \quad \text{BOXMATH.VN}$$

$$5.15. \int \frac{x^5 - x^3 + 1}{x^2 - x} dx.$$

$$5.17. \int \frac{2x^5 - 8x^3 + 3}{x^2 - 2x} dx.$$

$$5.19. \int \frac{-x^5 + 9x^3 + 4}{x^2 + 3x} dx.$$

$$5.21. \int \frac{x^3 - 5x^2 + 5x + 23}{(x-1)(x+1)(x-5)} dx.$$

$$5.23. \int \frac{2x^4 - 5x^2 - 8x - 8}{x(x-2)(x+2)} dx. \quad \text{BOXMATH.VN}$$

$$5.25. \int \frac{3x^4 + 3x^3 - 5x^2 + 2}{x(x-1)(x+2)} dx.$$

$$5.27. \int \frac{x^5 - x^4 - 6x^3 + 13x + 6}{x(x-3)(x+2)} dx.$$

$$5.29. \int \frac{2x^4 + 2x^3 - 3x^2 + 2x - 9}{x(x-1)(x+3)} dx.$$

$$5.31. \int \frac{2x^3 - 40x - 8}{x(x+4)(x-2)} dx.$$

$$5.14. \int \frac{x^3 - 3x^2 - 12}{(x-4)(x-2)x} dx.$$

$$5.16. \int \frac{x^5 + 3x^3 - 1}{x^2 + x} dx.$$

$$5.18. \int \frac{3x^5 - 12x^3 - 7}{x^2 + 2x} dx.$$

$$5.20. \int \frac{-x^5 + 25x^3 + 1}{x^2 + 5x} dx.$$

$$5.22. \int \frac{x^5 + 2x^4 - 2x^3 + 5x^2 - 7x + 9}{(x+3)(x-1)x} dx.$$

$$5.24. \int \frac{4x^4 + 2x^2 - x - 3}{x(x-1)(x+1)} dx.$$

$$5.26. \int \frac{2x^4 + 2x^3 - 41x^2 + 20}{x(x-4)(x+5)} dx.$$

$$5.28. \int \frac{3x^3 - x^2 - 12x - 2}{x(x+1)(x-2)} dx.$$

$$5.30. \int \frac{2x^3 - x^2 - 7x - 12}{x(x-3)(x+1)} dx.$$

$$6.1. \int \frac{x^3 + 6x^2 + 13x + 9}{(x+1)(x+2)^3} dx.$$

$$6.3. \int \frac{x^3 - 6x^2 + 13x - 6}{(x+2)(x-2)^3} dx.$$

$$6.5. \int \frac{x^3 - 6x^2 + 11x - 10}{(x+2)(x-2)^3} dx.$$

$$6.2. \int \frac{x^3 + 6x^2 + 13x + 8}{x(x+2)^3} dx.$$

$$6.4. \int \frac{x^3 + 6x^2 + 14x + 10}{(x+1)(x+2)^3} dx.$$

$$6.6. \int \frac{x^3 + 6x^2 + 11x + 7}{(x+1)(x+2)^3} dx.$$

$$6.7. \int \frac{2x^3 + 6x^2 + 7x + 1}{(x-1)(x+1)^3} dx.$$

$$6.9. \int \frac{2x^3 + 6x^2 + 7x + 2}{x(x+1)^3} dx.$$

$$6.11. \int \frac{x^3 - 6x^2 + 13x - 7}{(x+1)(x-2)^3} dx.$$

$$6.13. \int \frac{x^3 - 6x^2 + 10x - 10}{(x+1)(x-2)^3} dx.$$

$$6.15. \int \frac{3x^3 + 9x^2 + 10x + 2}{(x-1)(x+1)^3} dx.$$

$$6.17. \int \frac{2x^3 + 6x^2 + 7x + 4}{(x+2)(x+1)^3} dx.$$

$$6.19. \int \frac{2x^3 + 6x^2 + 7x}{(x-2)(x+1)^3} dx.$$

$$6.21. \int \frac{x^3 + 6x^2 + 4x + 24}{(x-2)(x+2)^3} dx.$$

$$6.23. \int \frac{x^3 + 6x^2 + 18x - 4}{(x-2)(x+2)^3} dx.$$

$$6.25. \int \frac{x^3 - 6x^2 + 14x - 4}{(x+2)(x-2)^3} dx.$$

$$6.27. \int \frac{2x^3 - 6x^2 + 7x - 4}{(x-2)(x-1)^3} dx.$$

$$6.29. \int \frac{x^3 + 6x^2 - 10x + 52}{(x-2)(x+2)^3} dx.$$

$$6.8. \int \frac{x^3 + 6x^2 + 10x + 10}{(x-1)(x+2)^3} dx.$$

$$6.10. \int \frac{x^3 - 6x^2 + 13x - 8}{x(x-2)^3} dx.$$

$$6.12. \int \frac{x^3 - 6x^2 + 14x - 6}{(x+1)(x-2)^3} dx.$$

$$6.14. \int \frac{x^3 + x + 2}{(x+2)x^3} dx.$$

$$6.16. \int \frac{2x^3 + x + 1}{(x+1)x^3} dx.$$

$$6.18. \int \frac{2x^3 + 6x^2 + 5x}{(x+2)(x+1)^3} dx.$$

$$6.20. \int \frac{2x^3 + 6x^2 + 5x + 4}{(x-2)(x+1)^3} dx.$$

$$6.22. \int \frac{x^3 + 6x^2 + 14x + 4}{(x-2)(x+2)^3} dx.$$

$$6.24. \int \frac{x^3 + 6x^2 + 10x + 12}{(x-2)(x+2)^3} dx.$$

$$6.26. \int \frac{x^3 + 6x^2 + 15x + 2}{(x-2)(x+2)^3} dx.$$

$$6.28. \int \frac{2x^3 - 6x^2 + 7x}{(x+2)(x-1)^3} dx.$$

$$6.30. \int \frac{x^3 - 6x^2 + 13x - 6}{(x+2)(x-2)^3} dx.$$

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$$6.31. \int \frac{x^3 + 6x^2 + 13x + 6}{(x-2)(x+2)^3} dx. \quad \text{BOXMATH.VN}$$

$$7.1. \int \frac{x^3 + 4x^2 + 4x + 2}{(x+1)^2(x^2 + x + 1)} dx.$$

$$7.2. \int \frac{x^3 + 4x^2 + 3x + 2}{(x+1)^2(x^2 + 1)} dx.$$

$$7.3. \int \frac{2x^3 + 7x^2 + 7x - 1}{(x+2)^2(x^2 + x + 1)} dx.$$

$$7.4. \int \frac{2x^3 + 4x^2 + 2x - 1}{(x+1)^2(x^2 + 2x + 2)} dx.$$

$$7.5. \int \frac{x^3 + 6x^2 + 9x + 6}{(x+1)^2(x^2 + 2x + 2)} dx.$$

$$7.6. \int \frac{2x^3 + 11x^2 + 16x + 10}{(x+2)^2(x^2 + 2x + 3)} dx.$$

$$7.7. \int \frac{3x^3 + 6x^2 + 5x - 1}{(x+1)^2(x^2 + 2)} dx.$$

$$7.8. \int \frac{x^3 + 9x^2 + 21x + 21}{(x+3)^2(x^2 + 3)} dx.$$

$$7.9. \int \frac{x^3 + 6x^2 + 8x + 8}{(x+2)^2(x^2 + 4)} dx.$$

$$7.10. \int \frac{x^3 + 5x^2 + 12x + 4}{(x+2)^2(x^2 + 4)} dx.$$

$$7.11. \int \frac{2x^3 - 4x^2 - 16x - 12}{(x-1)^2(x^2 + 4x + 5)} dx.$$

$$7.12. \int \frac{-3x^3 + 13x^2 - 13x + 1}{(x-2)^2(x^2 - x + 1)} dx.$$

$$7.13. \int \frac{x^3 + 2x^2 + 10x}{(x+1)^2(x^2 - x + 1)} dx.$$

$$7.14. \int \frac{3x^3 + x + 46}{(x-1)^2(x^2 + 9)} dx.$$

$$7.15. \int \frac{4x^3 + 24x^2 + 20x - 28}{(x+3)^2(x^2 + 2x + 2)} dx.$$

$$7.16. \int \frac{2x^3 + 3x^2 + 3x + 2}{(x^2 + x + 1)(x^2 + 1)} dx.$$

$$7.17. \int \frac{x^3 + x + 1}{(x^2 + x + 1)(x^2 + 1)} dx.$$

$$7.18. \int \frac{x^2 + x + 3}{(x^2 + x + 1)(x^2 + 1)} dx.$$

$$7.19. \int \frac{2x^3 + 4x^2 + 2x + 2}{(x^2 + x + 1)(x^2 + x + 2)} dx.$$

$$7.20. \int \frac{2x^3 + 7x^2 + 7x + 9}{(x^2 + x + 1)(x^2 + x + 2)} dx.$$

$$7.21. \int \frac{4x^2 + 3x + 4}{(x^2 + 1)(x^2 + x + 1)} dx.$$

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$$7.22. \int \frac{3x^3 + 4x^2 + 6x}{(x^2 + 2)(x^2 + 2x + 2)} dx.$$

$$7.23. \int \frac{2x^2 - x + 1}{(x^2 - x + 1)(x^2 + 1)} dx.$$

$$7.24. \int \frac{x^3 + x^2 + 1}{(x^2 - x + 1)(x^2 + 1)} dx.$$

$$7.25. \int \frac{x^3 + x + 1}{(x^2 - x + 1)(x^2 + 1)} dx.$$

$$7.26. \int \frac{2x^3 + 2x + 1}{(x^2 - x + 1)(x^2 + 1)} dx.$$

$$7.28. \int \frac{x^3 + 2x^2 + x + 1}{(x^2 + x + 1)(x^2 + 1)} dx.$$

$$7.29. \int \frac{x + 4}{(x^2 + x + 2)(x^2 + 2)} dx.$$

$$7.30. \int \frac{2x^3 + 2x^2 + 2x + 1}{(x^2 + x + 1)(x^2 + 1)} dx.$$

$$7.30. \int \frac{3x^3 + 7x^2 + 12x + 6}{(x^2 + x + 3)(x^2 + 2x + 3)} dx.$$

$$7.31. \int \frac{2x^3 + 3x^2 + 3x + 2}{(x^2 + x + 1)(x^2 + 1)} dx.$$

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$$8.1. \int_{\pi/2}^{2 \arctg 2} \frac{dx}{\sin^2 x (1 - \cos x)}.$$

$$8.2. \int_0^{\pi/2} \frac{\cos x dx}{2 + \cos x}.$$

$$8.3. \int_{\pi/2}^{2 \arctg 2} \frac{dx}{\sin^2 x (1 + \cos x)}.$$

$$8.4. \int_{2 \arctg(1/2)}^{\pi/2} \frac{\cos x dx}{(1 - \cos x)^3}.$$

$$8.5. \int_0^{\pi/2} \frac{\cos x - \sin x}{(1 + \sin x)^2} dx.$$

$$8.6. \int_{2 \arctg 2}^{2 \arctg 3} \frac{dx}{\cos x (1 - \cos x)}.$$

$$8.7. \int_{2 \arctg(1/3)}^{2 \arctg(1/2)} \frac{dx}{\sin x (1 - \sin x)}.$$

$$8.8. \int_{2 \arctg(1/2)}^{\pi/2} \frac{dx}{(1 + \sin x - \cos x)^2}.$$

$$8.9. \int_0^{\pi/2} \frac{\cos x dx}{5 + 4 \cos x}.$$

$$8.11. \int_{\pi/3}^{\pi/2} \frac{\cos x dx}{1 + \sin x - \cos x}.$$

$$8.13. \int_0^{\pi/2} \frac{\sin dx}{1 + \sin x + \cos x}.$$

$$8.15. \int_0^{\pi/2} \frac{\cos x dx}{1 + \sin x + \cos x}.$$

$$8.17. \int_{-2\pi/3}^0 \frac{\cos x dx}{1 + \cos x - \sin x}.$$

$$8.19. \int_0^{\pi/2} \frac{\cos x dx}{(1 + \cos x + \sin x)^2}.$$

$$8.21. \int_0^{\pi/2} \frac{\sin x dx}{(1 + \sin x)^2}.$$

$$8.23. \int_{-\pi/2}^0 \frac{\sin x dx}{(1 + \cos x - \sin x)^2}.$$

$$8.25. \int_0^{\pi/2} \frac{\sin^2 x dx}{(1 + \cos x + \sin x)^2}.$$

$$8.27. \int_{\pi/2}^{2 \operatorname{arctg} 2} \frac{dx}{\sin x (1 + \sin x)}.$$

$$8.29. \int_0^{\pi/2} \frac{\sin x dx}{2 + \sin x}.$$

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$$8.10. \int_0^{2\pi/3} \frac{1 + \sin x}{1 + \cos x + \sin x} dx.$$

$$8.12. \int_0^{\pi/2} \frac{(1 + \cos x) dx}{1 + \sin x + \cos x}.$$

$$8.14. \int_0^{2 \operatorname{arctg}(1/2)} \frac{1 + \sin x}{(1 - \sin x)^2} dx.$$

$$8.16. \int_0^{2 \operatorname{arctg}(1/3)} \frac{\cos x dx}{(1 - \sin x)(1 + \cos x)}.$$

$$8.18. \int_{-\pi/2}^0 \frac{\cos x dx}{(1 + \cos x - \sin x)^2}.$$

$$8.20. \int_0^{2 \operatorname{arctg}(1/2)} \frac{(1 - \sin x) dx}{\cos x (1 + \cos x)}.$$

$$8.22. \int_0^{\pi/2} \frac{\sin x dx}{(1 + \cos x + \sin x)^2}.$$

$$8.24. \int_{-2\pi/3}^0 \frac{\cos^2 x dx}{(1 + \cos x - \sin x)^2}.$$

$$8.26. \int_0^{2\pi/3} \frac{\cos^2 x dx}{(1 + \cos x + \sin x)^2}.$$

$$8.28. \int_0^{\pi/2} \frac{dx}{(1 + \cos x + \sin x)^2}.$$

$$8.30. \int_0^{\pi/4} \frac{dx}{\cos x (1 + \cos x)}.$$

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$$8.31. \int_0^{\pi/2} \frac{\sin x dx}{5 + 3 \sin x}.$$

$$9.1. \int_{\pi/4}^{\operatorname{arctg} 3} \frac{dx}{(3 \operatorname{tg} x + 5) \sin 2x}.$$

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$$9.2. \int_{\arccos(4/\sqrt{17})}^{\pi/4} \frac{2 \operatorname{ctg} x + 1}{(2 \sin x + \cos x)^2} dx.$$

$$9.3. \int_0^{\arccos(1/\sqrt{17})} \frac{3 + 2 \operatorname{tg} x}{2 \sin^2 x + 3 \cos^2 x - 1} dx.$$

$$9.4. \int_{\pi/4}^{\operatorname{arctg} 3} \frac{4 \operatorname{tg} x - 5}{1 - \sin 2x + 4 \cos^2 x} dx.$$

$$9.5. \int_0^{\operatorname{arctg}(1/3)} \frac{(8 + \operatorname{tg} x)}{18 \sin^2 x + 2 \cos^2 x} dx.$$

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$$9.6. \int_0^{\arccos \sqrt{2/3}} \frac{\operatorname{tg} x + 2}{\sin^2 x + 2 \cos^2 x - 3} dx.$$

$$9.7. \int_{\arcsin(1/\sqrt{37})}^{\pi/4} \frac{6 \operatorname{tg} x dx}{3 \sin 2x + 5 \cos^2 x}.$$

$$9.8. \int_0^{\pi/4} \frac{2 \operatorname{tg}^2 x - 11 \operatorname{tg} x - 22}{4 - \operatorname{tg} x} dx.$$

$$9.9. \int_{-\operatorname{arctg}(1/3)}^0 \frac{3 \operatorname{tg} x + 1}{2 \sin 2x - 5 \cos 2x + 1} dx.$$

$$9.10. \int_{\pi/4}^{\operatorname{arctg} 3} \frac{1 + \operatorname{ctg} x}{(\sin x + 2 \cos x)^2} dx.$$

$$9.11. \int_{\pi/4}^{\arccos(1/\sqrt{3})} \frac{\operatorname{tg} x}{\sin^2 x - 5 \cos^2 x + 4} dx.$$

$$9.12. \int_0^{\pi/4} \frac{6 \sin^2 x}{3 \cos 2x - 4} dx.$$

$$9.13. \int_0^{\operatorname{arctg} 3} \frac{4 + \operatorname{tg} x}{2 \sin^2 x + 18 \cos^2 x} dx.$$

$$9.14. \int_0^{\operatorname{arctg} 2} \frac{12 + \operatorname{tg} x}{3 \sin^2 x + 12 \cos^2 x} dx.$$

$$9.15. \int_0^{\operatorname{arctg}(2/3)} \frac{6 + \operatorname{tg} x}{9 \sin^2 x + 4 \cos^2 x} dx.$$

$$9.16. \int_0^{\arcsin \sqrt{3/7}} \frac{\operatorname{tg}^2 x dx}{3 \sin^2 x + 4 \cos^2 x - 7}.$$

$$9.17. \int_0^{\pi/4} \frac{7 + 3 \operatorname{tg} x}{(\sin x + 2 \cos x)^2} dx.$$

$$9.18. \int_{\arcsin(2/\sqrt{5})}^{\arcsin(3/\sqrt{10})} \frac{2 \operatorname{tg} x + 5}{(5 - \operatorname{tg} x) \sin 2x} dx.$$

$$9.19. \int_{-\arccos(1/\sqrt{10})}^0 \frac{3 \operatorname{tg}^2 x - 50}{2 \operatorname{tg} x + 7} dx.$$

$$9.20. \int_0^{\pi/4} \frac{5 \operatorname{tg} x + 2}{2 \sin 2x + 5} dx.$$

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$$9.21. \int_{\pi/4}^{\arcsin(2/\sqrt{5})} \frac{4 \operatorname{tg} x - 5}{4 \cos^2 x - \sin 2x + 1} dx.$$

$$9.22. \int_0^{\arcsin \sqrt{7/8}} \frac{6 \sin^2 x}{4 + 3 \cos 2x} dx.$$

$$9.23. \int_{-\arccos(1/\sqrt{5})}^0 \frac{11 - 3 \operatorname{tg} x}{\operatorname{tg} x + 3} dx.$$

$$9.24. \int_0^{\arcsin 3\sqrt{10}} \frac{2 \operatorname{tg} x - 5}{(4 \cos x - \sin x)^2} dx.$$

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$$9.25. \int_{\pi/4}^{\arccos(1/\sqrt{26})} \frac{dx}{(6 - \operatorname{tg} x) \sin 2x}.$$

$$9.26. \int_0^{\pi/4} \frac{4 - 7 \operatorname{tg} x}{2 + 3 \operatorname{tg} x} dx.$$

$$9.27. \int_{-\arcsin(2/\sqrt{5})}^{\pi/4} \frac{2 - \operatorname{tg} x}{(\sin x + 3 \cos x)^2} dx.$$

$$9.28. \int_{\pi/4}^{\arcsin \sqrt{2/3}} \frac{8 \operatorname{tg} x dx}{3 \cos^2 x + 8 \sin 2x - 7}.$$

$$9.29. \int_{\arccos(1/\sqrt{10})}^{\arccos(1/\sqrt{26})} \frac{12 dx}{(6 + 5 \operatorname{tg} x) \sin 2x}.$$

$$9.30. \int_0^{\pi/3} \frac{\operatorname{tg}^2 x}{4 + 3 \cos 2x} dx.$$

$$9.31. \int_0^{\arccos(1/\sqrt{6})} \frac{3 \operatorname{tg}^2 x - 1}{\operatorname{tg}^2 x + 5}.$$

$$10.1. \int_{\pi/2}^{\pi} 2^8 \sin^8 x \, dx.$$

$$10.2. \int_0^{\pi} 2^4 \sin^6 x \cos^2 x \, dx.$$

$$10.3. \int_0^{2\pi} \sin^4 x \cos^4 x \, dx.$$

$$10.4. \int_0^{2\pi} \sin^2(x/4) \cos^6(x/4) \, dx.$$

$$10.5. \int_0^{\pi} 2^4 \cos^8(x/2) dx.$$

$$10.6. \int_{-\pi/2}^0 2^8 \sin^8 x dx.$$

$$10.7. \int_{\pi/2}^{\pi} 2^4 \sin^6 x \cos^2 x dx.$$

$$10.8. \int_0^{\pi} 2^4 \sin^4 x \cos^4 x dx.$$

$$10.9. \int_0^{2\pi} \sin^2 x \cos^6 x dx.$$

$$10.10. \int_0^{2\pi} \cos^8(x/4) dx.$$

$$10.11. \int_0^{\pi} 2^4 \sin^8(x/2) dx.$$

$$10.12. \int_{-\pi}^0 2^8 \sin^6 x \cos^2 x dx.$$

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$$10.13. \int_{\pi/2}^{2\pi} 2^8 \sin^4 x \cos^4 x dx.$$

$$10.14. \int_0^{\pi} 2^4 \sin^2 x \cos^6 x dx.$$

$$10.15. \int_0^{2\pi} \cos^8 x dx.$$

$$10.16. \int_0^{2\pi} \sin^8(x/4) dx.$$

$$10.17. \int_0^{\pi} 2^4 \sin^6(x/2) \cos^2(x/2) dx.$$

$$10.18. \int_{-\pi/2}^0 2^8 \sin^4 x \cos^4 x dx.$$

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$$10.19. \int_{\pi/2}^{\pi} 2^8 \sin^2 x \cos^6 x dx.$$

$$10.20. \int_0^{\pi} 2^4 \cos^8 x dx.$$

$$10.21. \int_0^{2\pi} \sin^8 x dx.$$

$$10.22. \int_0^{2\pi} \sin^6(x/4) \cos^2(x/4) dx.$$

$$10.23. \int_0^{\pi} 2^4 \sin^4(x/2) \cos^4(x/2) dx.$$

$$10.24. \int_{-\pi/2}^0 2^8 \sin^2 x \cos^6 x dx.$$

$$10.25. \int_{\pi/2}^{2\pi} 2^8 \cos^8 x dx.$$

$$10.26. \int_0^{\pi} 2^4 \sin^8 x dx.$$

$$10.27. \int_0^{2\pi} \sin^6 x \cos^2 x \, dx.$$

$$10.28. \int_0^{2\pi} \sin^4(x/4) \cos^4(x/4) \, dx.$$

$$10.29. \int_0^{\pi} 2^4 \sin^2(x/2) \cos^6(x/2) \, dx.$$

$$10.30. \int_{-\pi/2}^0 2^8 \cos^8 x \, dx.$$

$$10.31. \int_0^{2\pi} \sin^4 3x \cos^4 3x \, dx.$$

$$11.1. \int_0^1 \frac{4\sqrt{1-x} - \sqrt{3x+1}}{(\sqrt{3x+1} + 4\sqrt{1-x})(3x+1)^2} \, dx.$$

$$11.2. \int_1^{64} \frac{1 - \sqrt[6]{x} + 2\sqrt[3]{x}}{x + 2\sqrt{x^3} + \sqrt[3]{x^4}} \, dx.$$

$$11.3. \int_{-14/15}^{-7/8} \frac{6\sqrt{x+2}}{(x+2)^2 \sqrt{x+1}} \, dx.$$

$$11.4. \int_6^9 \sqrt{\frac{9-2x}{2x-21}} \, dx.$$

$$11.5. \int_0^5 e^{\sqrt{\frac{5-x}{5+x}}} \frac{dx}{(5+x)\sqrt{25-x^2}}.$$

$$11.6. \int_8^{12} \sqrt{\frac{6-x}{x-14}} \, dx.$$

$$11.7. \int_0^1 e^{\sqrt{\frac{1-x}{1+x}}} \frac{dx}{(1+x)\sqrt{1-x^2}}.$$

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$$1.8. \int_{5/2}^{10/3} \frac{\sqrt{x+2} + \sqrt{x-2}}{(\sqrt{x+2} - \sqrt{x-2})(x-2)^2} \, dx.$$

$$11.9. \int_1^8 \frac{5\sqrt{x+24}}{(x+24)^2 \sqrt{x}} \, dx.$$

$$11.10. \int_1^2 \frac{x + \sqrt{3x-2} - 10}{\sqrt{3x-2} + 7} \, dx.$$

$$11.11. \int_6^{10} \sqrt{\frac{4-x}{x-12}} \, dx.$$

$$11.12. \int_0^2 \frac{(4\sqrt{2-x} - \sqrt{2x+2}) \, dx}{(\sqrt{2x+2} + 4\sqrt{2-x})(2x+2)^2}.$$

$$11.13. \int_{-1/2}^0 \frac{x \, dx}{2 + \sqrt{2x+1}}.$$

$$11.14. \int_0^4 e^{\sqrt{\frac{4-x}{4+x}}} \frac{dx}{(4+x)\sqrt{16-x^2}}.$$

$$11.15. \int_{1/8}^1 \frac{15\sqrt{x+3}}{(x+3)^2 \sqrt{x}} dx.$$

$$11.16. \int_{-5/3}^1 \frac{\sqrt[3]{3x+5} + 2}{1 + \sqrt[3]{3x+5}} dx.$$

$$11.17. \int_2^3 \sqrt{\frac{3-2x}{2x-7}} dx.$$

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$$11.18. \int_0^7 \frac{\sqrt{x+25}}{(x+25)^2 \sqrt{x+1}} dx.$$

$$11.19. \int_0^2 \frac{(4\sqrt{2-x} - \sqrt{3x+2}) dx}{(\sqrt{3x+2} + 4\sqrt{2-x})(3x+2)^2}.$$

$$11.20. \int_0^2 e^{\sqrt{\frac{2-x}{2+x}}} \frac{dx}{(2+x)\sqrt{4-x^2}}.$$

$$11.21. \int_3^5 \sqrt{\frac{2-x}{x-6}} dx.$$

$$11.22. \int_{1/24}^{1/3} \frac{5\sqrt{x+1}}{(x+1)^2 \sqrt{x}} dx.$$

$$11.23. \int_9^{15} \sqrt{\frac{6-x}{x-18}} dx.$$

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$$\int_0^1 \frac{(4\sqrt{1-x} - \sqrt{2x+1}) dx}{(\sqrt{2x+1} + 4\sqrt{1-x})(2x+1)^2}.$$

$$11.25. \int_1^{64} \frac{(2 + \sqrt[3]{x}) dx}{(\sqrt[6]{x} + 2\sqrt{x^3} + \sqrt{x})\sqrt{x}}.$$

$$11.26. \int_{16/15}^{4/3} \frac{4\sqrt{x}}{x^2 \sqrt{x-1}} dx.$$

$$11.27. \int_0^6 \frac{e^{\sqrt{(6-x)/(6+x)}} dx}{(6+x)\sqrt{36-x^2}}.$$

$$11.28. \int_1^{64} \frac{6 - \sqrt{x} + \sqrt[4]{x}}{\sqrt{x^3} - 7x - 6\sqrt[4]{x^3}} dx.$$

$$11.29. \int_0^1 \frac{(4\sqrt{1-x} - \sqrt{x+1}) dx}{(\sqrt{x+1} + 4\sqrt{1-x})(x+1)^2}.$$

$$11.30. \int_0^3 \frac{e^{\sqrt{(3-x)/(3+x)}} dx}{(3+x)\sqrt{9-x^2}}.$$

$$11.31. \int_0^2 \frac{(4\sqrt{2-x} - \sqrt{x+2}) dx}{(\sqrt{x+2} + 4\sqrt{2-x})(x+2)^2}.$$

$$12.1. \int_0^{16} \sqrt{256-x^2} dx.$$

$$12.2. \int_0^1 x^2 \sqrt{1-x^2} dx.$$



$$12.3. \int_0^5 \frac{dx}{(25+x^2)\sqrt{25+x^2}}.$$

$$12.4. \int_0^3 \frac{dx}{(9+x^2)^{3/2}}.$$

$$12.5. \int_0^{\sqrt{5}/2} \frac{dx}{\sqrt{(5-x^2)^3}}.$$

$$12.6. \int_1^2 \frac{\sqrt{x^2-1}}{x^4} dx.$$

$$12.7. \int_0^{\sqrt{2}/2} \frac{x^4 dx}{\sqrt{(1-x^2)^3}}.$$

$$12.8. \int_0^{\sqrt{3}} \frac{dx}{\sqrt{(4-x^2)^3}}.$$

$$12.9. \int_0^1 \frac{x^4 dx}{(2-x^2)^{3/2}}.$$

$$12.10. \int_0^2 \frac{x^2 dx}{\sqrt{16-x^2}}.$$

$$12.11. \int_0^2 \sqrt{4-x^2} dx.$$

$$\text{BOXMATH.VN} \quad \int_0^{\sqrt{3}} \frac{dx}{(16+x^2)^{3/2}}.$$

$$12.13. \int_0^4 x^2 \sqrt{16-x^2} dx.$$

$$12.14. \int_0^{5/2} \frac{x^2 dx}{\sqrt{25-x^2}}.$$

$$12.15. \int_0^5 x^2 \sqrt{25-x^2} dx.$$

$$12.16. \int_0^4 \sqrt{16-x^2} dx.$$

$$12.17. \int_0^{4\sqrt{3}} \frac{dx}{\sqrt{(64-x^2)^3}}.$$

$$12.18. \int_{\sqrt{2}}^{2\sqrt{2}} \frac{\sqrt{x^2-2}}{x^4} dx.$$

$$12.19. \int_0^{2\sqrt{2}} \frac{x^4 dx}{(16-x^2)\sqrt{16-x^2}}.$$

$$12.20. \int_{-3}^3 x^2 \sqrt{9-x^2} dx.$$

$$12.21. \int_1^{\sqrt{3}} \frac{dx}{\sqrt{(1+x^2)^3}}.$$

$$12.22. \int_0^2 \frac{dx}{\sqrt{(16-x^2)^3}}.$$

$$12.23. \int_0^2 \frac{x^4 dx}{\sqrt{(8-x^2)^3}}.$$

$$12.24. \int_3^6 \frac{\sqrt{x^2-9}}{x^4} dx.$$

$$12.25. \int_0^1 \sqrt{4-x^2} dx.$$

$$12.26. \int_2^4 \frac{\sqrt{x^2-4}}{x^4} dx.$$

$$12.27. \int_0^2 \frac{dx}{(4+x^2)\sqrt{4+x^2}}.$$

$$12.28. \int_0^{\sqrt{2}} \frac{x^4 dx}{(4-x^2)^{3/2}}.$$

$$12.29. \int_0^{1/\sqrt{2}} \frac{dx}{(1-x^2)\sqrt{1-x^2}}.$$

$$12.30. \int_0^1 \frac{x^2 dx}{\sqrt{4-x^2}}.$$

$$12.31. \int_0^{3/2} \frac{x^2 dx}{\sqrt{9-x^2}}.$$

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$$13.1. \int \frac{\sqrt{1+\sqrt{x}}}{x^4 \sqrt{x^3}} dx.$$

$$13.2. \int \frac{\sqrt[3]{1+\sqrt{x}}}{x^3 \sqrt{x^2}} dx.$$

$$13.3. \int \frac{\sqrt{1+\sqrt[3]{x}}}{x \sqrt{x}} dx.$$

$$13.4. \int \frac{\sqrt[3]{1+\sqrt[3]{x}}}{x^9 \sqrt{x^4}} dx.$$

$$13.5. \int \frac{\sqrt[3]{1+\sqrt[3]{x^2}}}{x^9 \sqrt{x^8}} dx.$$

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$$13.6. \int \frac{\sqrt[3]{(1+\sqrt[3]{x})^2}}{x^9 \sqrt{x^5}} dx.$$

$$13.7. \int \frac{\sqrt[3]{(1+\sqrt[3]{x^2})^2}}{x^2 \sqrt[9]{x}} dx.$$

$$13.8. \int \frac{\sqrt[3]{(1+\sqrt{x})^2}}{x^6 \sqrt{x^5}} dx.$$

$$13.9. \int \frac{\sqrt{1 + \sqrt[3]{x^2}}}{x^2} dx.$$

$$13.10. \int \frac{\sqrt{1+x}}{x^2 \sqrt{x}} dx.$$

$$13.11. \int \frac{\sqrt[4]{(1 + \sqrt{x})^3}}{x^8 \sqrt[8]{x^7}} dx.$$

$$13.12. \int \frac{\sqrt[4]{(1 + \sqrt[3]{x})^3}}{x^{12} \sqrt[12]{x^7}} dx.$$

$$13.13. \int \frac{\sqrt[4]{(1 + \sqrt[3]{x^2})^3}}{x^2 \sqrt[6]{x}} dx.$$

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$$13.14. \int \frac{\sqrt{1 + \sqrt[4]{x^3}}}{x^2 \sqrt[8]{x}} dx.$$

$$13.15. \int \frac{\sqrt[3]{1 + \sqrt[4]{x^3}}}{x^2} dx.$$

$$13.16. \int \frac{\sqrt[3]{(1 + \sqrt[4]{x^3})^2}}{x^2 \sqrt[4]{x}} dx.$$

$$13.17. \int \frac{\sqrt[5]{(1 + \sqrt{x})^4}}{x^{10} \sqrt[10]{x^9}} dx.$$

$$13.18. \int \frac{\sqrt[5]{(1 + \sqrt[3]{x})^4}}{x^5 \sqrt[5]{x^3}} dx.$$

$$13.19. \int \frac{\sqrt[5]{(1 + \sqrt[3]{x^2})^4}}{x^2 \sqrt[5]{x}} dx.$$

$$13.20. \int \frac{\sqrt[5]{(1 + \sqrt[4]{x^3})^4}}{x^2 \sqrt[20]{x^7}} dx.$$

$$13.21. \int \frac{\sqrt[5]{1 + \sqrt[5]{x^4}}}{x^2 \sqrt[25]{x^{11}}} dx.$$

$$13.22. \int \frac{\sqrt{1 + \sqrt[5]{x^4}}}{x^2 \sqrt[5]{x}} dx.$$

$$13.23. \int \frac{\sqrt[3]{1 + \sqrt[5]{x^4}}}{x^2 \sqrt[15]{x}} dx.$$

$$13.24. \int \frac{\sqrt[3]{(1 + \sqrt[5]{x^4})^2}}{x^2 \sqrt[3]{x}} dx.$$

$$13.25. \int \frac{\sqrt[4]{(1 + \sqrt[5]{x^4})^3}}{x^2 \sqrt[5]{x^2}} dx.$$

$$13.26. \int \frac{\sqrt[3]{1 + \sqrt[4]{x}}}{x^3 \sqrt{x}} dx.$$

$$13.27. \int \frac{\sqrt[3]{\left(1 + \sqrt[4]{x}\right)^2}}{x^{12}\sqrt{x^5}} dx.$$

$$13.28. \int \frac{\sqrt[4]{1 + \sqrt[3]{x}}}{x^{12}\sqrt{x^5}} dx.$$

$$13.29. \int \frac{\sqrt[4]{1 + \sqrt[3]{x^2}}}{x^6\sqrt{x^5}} dx.$$

$$13.30. \int \frac{\sqrt[3]{1 + \sqrt[5]{x}}}{x^{15}\sqrt{x^4}} dx.$$

$$13.31. \int \frac{\sqrt[5]{1 + \sqrt[3]{x}}}{x^5\sqrt{x^2}} dx.$$

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