

**Практическая работа
"Интегральное исчисление"**

Практическая работа по теме «Интегральное исчисление»

1. Найти неопределенный интеграл и результаты интегрирования проверить дифференцированием.

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|---|---|
| 1.1. $\int \frac{3 + \sqrt[3]{x^2} - 2x}{\sqrt{x}} dx.$ | 1.2. $\int \frac{2x^2 + 3\sqrt{x} - 1}{2x} dx.$ |
| 1.3. $\int \frac{3\sqrt{x} + 4x^2 - 5}{2x^3} dx.$ | 1.4. $\int \frac{2\sqrt{x} - x^2 + 3}{\sqrt[3]{x}} dx.$ |
| 1.5. $\int \frac{\sqrt[4]{x} - 2x + 5}{x^2} dx.$ | 1.6. $\int \frac{2x^3 - \sqrt{x} + 4}{\sqrt{x}} dx.$ |
| 1.7. $\int \left(\sqrt[3]{x} - \frac{2\sqrt[4]{x}}{x} + 3 \right) dx.$ | 1.8. $\int \frac{2x^3 - \sqrt{x^5} + 1}{\sqrt{x}} dx.$ |
| 1.9. $\int \frac{3x^2 - \sqrt[5]{x} + 2}{x} dx.$ | 1.10. $\int \frac{2x^3 - \sqrt{x} + 4}{x^2} dx.$ |
| 1.11. $\int \frac{\sqrt[6]{x^5} - 5x^2 + 3}{x} dx.$ | 1.12. $\int \left(x\sqrt{x} - \frac{1}{\sqrt{x^3}} + 1 \right) dx.$ |
| 1.13. $\int \left(x^2 - \frac{\sqrt[6]{x}}{x} - 3 \right) dx.$ | 1.14. $\int \frac{\sqrt[3]{x^2} - 2x^3 + 3}{x} dx.$ |
| 1.15. $\int \left(\frac{\sqrt[3]{x}}{x} + 2x^3 - 4 \right) dx.$ | 1.16. $\int \frac{\sqrt{x^3} - 3x^4 + 2}{x} dx.$ |
| 1.17. $\int \left(2x^3 - 3\sqrt{x^5} + \frac{4}{x} \right) dx.$ | 1.18. $\int \frac{2x^3 - \sqrt{x^5} + 5}{x^2} dx.$ |
| 1.19. $\int \frac{3x^2 - \sqrt{x^3} + 7}{x^3} dx.$ | 1.20. $\int \frac{3x^4 - \sqrt[3]{x^2} + 1}{x^2} dx.$ |
| 1.21. $\int \left(\sqrt[5]{x^2} - \frac{2}{x^4} + 4 \right) dx.$ | 1.22. $\int \frac{\sqrt{x} - 2x^3 + 6}{x} dx.$ |
| 1.23. $\int \frac{\sqrt[5]{x} - 2x^3 + 4}{x^2} dx.$ | 1.24. $\int \left(\sqrt{x} - \frac{3x^2}{\sqrt{x^3}} + 2 \right) dx.$ |
| 1.25. $\int \left(\sqrt[5]{x} - \frac{4}{x^5} + 2 \right) dx.$ | 1.26. $\int \frac{\sqrt[7]{x^6} - 2x^2 + 3}{x} dx.$ |
| 1.27. $\int \left(\frac{\sqrt[3]{x}}{x} - \frac{2}{x^3} + 1 \right) dx.$ | 1.28. $\int \left(\frac{2x^2}{\sqrt{x}} - \frac{5}{x} + 6 \right) dx.$ |
| 1.29. $\int \left(\frac{\sqrt[3]{x^2}}{x} - \frac{7}{x^3} + 5 \right) dx.$ | 1.30. $\int \left(\frac{5x^2}{\sqrt{x}} - \sqrt[3]{x^2} + 2 \right) dx.$ |

2.

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|---|---|
| 2.1. $\int \sqrt{3+x} dx.$ | 2.2. $\int \sqrt[3]{1+x} dx.$ |
| 2.3. $\int \sqrt[3]{(1+x)^2} dx.$ | 2.4. $\int \frac{dx}{\sqrt{1+x}}.$ |
| 2.5. $\int \frac{dx}{\sqrt{1-x}^3}.$ | 2.6. $\int \frac{dx}{\sqrt[3]{2+x}}.$ |
| 2.7. $\int (1-4x)^7 dx.$ | 2.8. $\int (1+4x)^5 dx.$ |
| 2.9. $\int (1-3x)^4 dx.$ | 2.10. $\int \sqrt{1+3x} dx.$ |
| 2.11. $\int \sqrt{5-4x} dx.$ | 2.12. $\int \frac{dx}{\sqrt[3]{5+3x}}.$ |
| 2.13. $\int \frac{dx}{\sqrt[3]{1-4x}^5}.$ | 2.14. $\int \frac{dx}{\sqrt[3]{3-4x}^3}.$ |
| 2.15. $\int \frac{dx}{\sqrt[3]{2-5x}}.$ | 2.16. $\int \sqrt[5]{3-2x} dx.$ |

$$\begin{array}{ll}
2.17. \int \sqrt[4]{1+3x} dx. & 2.18. \int \sqrt[3]{1+3x} dx. \\
2.19. \int \frac{dx}{\sqrt{(3-x)^5}}. & 2.20. \int \frac{dx}{\sqrt[3]{3+x}}. \\
2.21. \int \frac{dx}{(2+x)^3}. & 2.22. \int \sqrt[3]{5-2x} dx. \\
2.23. \int \sqrt{5-4x} dx. & 2.24. \int \sqrt[5]{(6-5x)^2} dx. \\
2.25. \int \sqrt[4]{2-5x} dx. & 2.26. \int \sqrt[3]{4-2x} dx. \\
2.27. \int \sqrt{3-4x} dx. & 2.28. \int \sqrt[3]{3+2x} dx. \\
2.29. \int \sqrt[4]{(3+5x)^3} dx. & 2.30. \int \sqrt[3]{(2-x)^2} dx.
\end{array}$$

$$\begin{array}{lll}
3.1. \int \frac{dx}{3-x}. & 3.2. \int \frac{dx}{3x+9}. & 3.3. \int \frac{dx}{2-3x}. \\
3.4. \int \frac{dx}{1-4x}. & 3.5. \int \frac{dx}{2+3x}. & 3.6. \int \frac{dx}{2-5x}. \\
3.7. \int \frac{dx}{3x-2}. & 3.8. \int \frac{dx}{2x+3}. & 3.9. \int \frac{dx}{3x-4}. \\
3.10. \int \frac{dx}{4-3x}. & 3.11. \int \frac{dx}{3x+4}. & 3.12. \int \frac{dx}{4x-2}. \\
3.13. \int \frac{dx}{5-3x}. & 3.14. \int \frac{dx}{4-7x}. & 3.15. \int \frac{dx}{5x-3}. \\
3.16. \int \frac{dx}{3-2x}. & 3.17. \int \frac{dx}{5+3x}. & 3.18. \int \frac{dx}{3-5x}. \\
3.19. \int \frac{dx}{5+4x}. & 3.20. \int \frac{dx}{6-3x}. & 3.21. \int \frac{dx}{6+5x}. \\
3.22. \int \frac{dx}{1-7x}. & 3.23. \int \frac{dx}{1+6x}. & 3.24. \int \frac{dx}{2+7x}. \\
3.25. \int \frac{dx}{7-3x}. & 3.26. \int \frac{dx}{5-2x}. & 3.27. \int \frac{dx}{2x+7}. \\
3.28. \int \frac{dx}{2x+9}. & 3.29. \int \frac{dx}{7x-3}. & 3.30. \int \frac{dx}{6x+1}.
\end{array}$$

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$$\begin{array}{ll}
4.1. \int \sin(2-3x) dx. & 4.2. \int \sin(3-2x) dx. \\
4.3. \int \sin(5-3x) dx. & 4.4. \int \cos(2+3x) dx. \\
4.5. \int \cos(3+2x) dx. & 4.6. \int \sin(4-2x) dx. \\
4.7. \int \cos(5-2x) dx. & 4.8. \int \cos(7x+3) dx. \\
4.9. \int \sin(8x-3) dx. & 4.10. \int \sin(3+4x) dx. \\
4.11. \int \sin(3-4x) dx. & 4.12. \int \cos(4x+3) dx. \\
4.13. \int \cos(3-4x) dx. & 4.14. \int \cos(2+5x) dx. \\
4.15. \int \cos(3x+5) dx. & 4.16. \int \sin(5x-3) dx. \\
4.17. \int \sin(5-3x) dx. & 4.18. \int \sin(3x+6) dx. \\
4.19. \int \cos(5x-8) dx. & 4.20. \int \cos(3x-7) dx. \\
4.21. \int \cos(5x-6) dx. & 4.22. \int \sin(7x+1) dx. \\
4.23. \int \cos(7x+3) dx. & 4.24. \int \sin(7-4x) dx. \\
4.25. \int \cos(3x-7) dx. & 4.26. \int \sin(8x-5) dx. \\
4.27. \int \cos(8x-4) dx. & 4.28. \int \sin(9x-1) dx. \\
4.29. \int \cos(10x-3) dx. & 4.30. \int \sin(9x+7) dx
\end{array}$$

$$\begin{array}{lll}
5.1. \int \frac{\sqrt{3} dx}{9x^2-3}. & 5.2. \int \frac{dx}{\sqrt{9x^2+3}}. & 5.3. \int \frac{dx}{9x^2+3}. \\
5.4. \int \frac{9 dx}{\sqrt{9x^2-3}}. & 5.5. \int \frac{dx}{\sqrt{3-9x^2}}. & 5.6. \int \frac{dx}{7x^2-4}. \\
5.7. \int \frac{3 dx}{\sqrt{7x^2-4}}. & 5.8. \int \frac{dx}{5x^2+3}. & 5.9. \int \frac{dx}{5x^2-3}.
\end{array}$$

$$\begin{array}{lll}
5.10. \int \frac{dx}{\sqrt{3-5x^2}} & 5.11. \int \frac{dx}{\sqrt{5x^2+3}} & 5.12. \int \frac{dx}{\sqrt{4-7x^2}} \\
5.13. \int \frac{\sqrt{5}dx}{\sqrt{3-4x^2}} & 5.14. \int \frac{dx}{\sqrt{2x^2-9}} & 5.15. \int \frac{dx}{2x^2+7} \\
5.16. \int \frac{dx}{\sqrt{3x^2+1}} & 5.17. \int \frac{dx}{3x^2+2} & 5.18. \int \frac{\sqrt{2}dx}{\sqrt{7-2x^2}} \\
5.19. \int \frac{\sqrt{14}dx}{2x^2-7} & 5.20. \int \frac{dx}{8x^2+9} & 5.21. \int \frac{dx}{3x^2-2} \\
5.22. \int \frac{dx}{4x^2+3} & 5.23. \int \frac{dx}{\sqrt{4x^2+3}} & 5.24. \int \frac{dx}{\sqrt{3-4x^2}} \\
5.25. \int \frac{dx}{\sqrt{9-8x^2}} & 5.26. \int \frac{dx}{4x^2-3} & 5.27. \int \frac{dx}{8x^2-9} \\
5.28. \int \frac{dx}{4x^2+7} & 5.29. \int \frac{2dx}{4+3x^2} & 5.30. \int \frac{2dx}{\sqrt{4x^2-3}}
\end{array}$$

$$\begin{array}{lll}
6.1. \int \frac{2xdx}{\sqrt{5-4x^2}} & 6.2. \int \frac{6xdx}{\sqrt{5-3x^2}} & 6.3. \int \frac{3xdx}{4x^2+1} \\
6.4. \int \frac{4xdx}{\sqrt{3-4x^2}} & 6.5. \int \frac{2xdx}{\sqrt{8x^2-9}} & 6.6. \int \frac{4xdx}{\sqrt{4x^2+3}} \\
6.7. \int \frac{xdx}{\sqrt{9-8x^2}} & 6.8. \int \frac{\sqrt{3}xdx}{\sqrt{3x^2-2}} & 6.9. \int \frac{2xdx}{\sqrt{3x^2-2}} \\
6.10. \int \frac{2xdx}{\sqrt{7-2x^2}} & 6.11. \int \frac{xdx}{2x^2-7} & 6.12. \int \frac{xdx}{3x^2+8} \\
6.13. \int \frac{2xdx}{3x^2-7} & 6.14. \int \frac{2xdx}{\sqrt{2x^2+5}} & 6.15. \int \frac{xdx}{\sqrt{7-3x^2}} \\
6.16. \int \frac{xdx}{2x^2+9} & 6.17. \int \frac{5xdx}{\sqrt{3-5x^2}} & 6.18. \int \frac{xdx}{\sqrt{3x^2+8}} \\
6.19. \int \frac{5xdx}{\sqrt{5x^2+3}} & 6.20. \int \frac{xdx}{3x^2-6} & 6.21. \int \frac{xdx}{5x^2+1} \\
6.22. \int \frac{5xdx}{5x^2-3} & 6.23. \int \frac{xdx}{2x^2-7} & 6.24. \int \frac{9xdx}{\sqrt{1-9x^2}} \\
6.25. \int \frac{3xdx}{9x^2+2} & 6.26. \int \frac{5xdx}{\sqrt{7x^2-1}} & 6.27. \int \frac{3xdx}{\sqrt{9x^2+5}} \\
6.28. \int \frac{2xdx}{5x^2-3} & 6.29. \int \frac{xdx}{3x^2-2} & 6.30. \int \frac{7xdx}{7x^2+1}
\end{array}$$

$$\begin{array}{lll}
8.1. \int e^{2x-7} dx & 8.2. \int e^{3+5x} dx & 8.3. \int e^{2-3x} dx \\
8.4. \int e^{2x+1} dx & 8.5. \int e^{7x-2} dx & 8.6. \int e^{5x-7} dx \\
8.7. \int e^{5x+7} dx & 8.8. \int e^{7-2x} dx & 8.9. \int e^{3-4x} dx \\
8.10. \int e^{10x+2} dx & 8.11. \int e^{2x-10} dx & 8.12. \int e^{4x+3} dx \\
8.13. \int e^{4x+5} dx & 8.14. \int e^{6x-1} dx & 8.15. \int e^{5-2x} dx \\
8.16. \int e^{4-3x} dx & 8.17. \int e^{3-5x} dx & 8.18. \int e^{1-4x} dx \\
8.19. \int e^{2-5x} dx & 8.20. \int e^{6x-4} dx & 8.21. \int e^{8x+1} dx \\
8.22. \int e^{2-6x} dx & 8.23. \int e^{2-4x} dx & 8.24. \int e^{3-6x} dx \\
8.25. \int e^{4-5x} dx & 8.26. \int e^{5-x} dx & 8.27. \int e^{7+3x} dx \\
8.28. \int e^{2x+3} dx & 8.29. \int e^{8x+1} dx & 8.30. \int e^{4-7x} dx
\end{array}$$

- 10.1. $\int \sin^4 2x \cos 2x dx.$ 10.2. $\int \frac{\cos 2x}{\sin^3 2x} dx.$
- 10.3. $\int \frac{\sin 3x}{\cos^4 3x} dx.$ 10.4. $\int \frac{\sin x}{\sqrt[3]{\cos x}} dx.$
- 10.5. $\int \frac{\sin x}{\cos^5 x} dx.$ 10.6. $\int \cos^7 2x \sin 2x dx.$
- 10.7. $\int \frac{\cos x dx}{\sin x + 2}.$ 10.8. $\int \frac{\cos x dx}{3 - \sin x}.$
- 10.9. $\int \frac{\sin x dx}{\sqrt{\cos x + 3}}.$ 10.10. $\int \frac{\sin x dx}{\sqrt[3]{\cos x + 1}}.$
- 10.11. $\int \frac{\cos x dx}{\sqrt{(\sin x - 4)^3}}.$ 10.12. $\int \frac{\sin 3x}{\cos^2 3x} dx.$
- 10.13. $\int \frac{\sin 5x}{\sqrt{\cos 5x}} dx.$ 10.14. $\int \frac{\cos 4x}{\sin^3 4x} dx.$
- 10.15. $\int \sin^3 4x \cos 4x dx.$ 10.16. $\int \sqrt[3]{\cos 2x} \sin 2x dx.$
- 10.17. $\int \sqrt{\cos^3 2x} \sin 2x dx.$ 10.18. $\int \frac{\sin 4x}{\sqrt[3]{\cos^2 4x}} dx.$
- 10.19. $\int \sin^3 5x \cos 5x dx.$ 10.20. $\int \frac{\cos 5x}{\sqrt{\sin^3 5x}} dx.$
- 10.21. $\int \frac{\sin 5x}{\cos^4 5x} dx.$ 10.22. $\int \sqrt{\cos 7x} \sin 7x dx.$
- 10.23. $\int \sin^6 3x \cos 3x dx.$ 10.24. $\int \frac{\cos 6x}{\sin^7 6x} dx.$
- 10.25. $\int \sqrt{\cos^3 2x} \sin 2x dx.$ 10.26. $\int \sin^4 8x \cos 8x dx.$
- 10.27. $\int \sin^5 4x \cos 4x dx.$ 10.28. $\int \frac{\sin 4x}{\sqrt[3]{\cos 4x}} dx.$
- 10.29. $\int \frac{\sin 2x}{\sqrt[3]{\cos^4 2x}} dx.$ 10.30. $\int \frac{\cos 6x}{\sin^4 6x} dx.$
- 11.1. $\int \frac{\sqrt{\lg^3 x}}{\cos^2 x} dx.$ 11.2. $\int \frac{dx}{\cos^2 x \sqrt{\lg^3 x}}.$
- 11.3. $\int \frac{dx}{\sin^2 x \operatorname{ctg}^4 x}.$ 11.4. $\int \frac{\operatorname{ctg}^3 2x}{\sin^2 2x} dx.$
- 11.5. $\int \frac{\lg^3 4x}{\cos^2 4x} dx.$ 11.6. $\int \frac{\sqrt[3]{\lg 5x}}{\cos^2 5x} dx.$
- 11.7. $\int \frac{\sqrt[3]{\operatorname{ctg}^2 x}}{\sin^2 x} dx.$ 11.8. $\int \frac{dx}{\sin^2 x \operatorname{ctg}^3 x}.$
- 11.9. $\int \frac{dx}{\cos^2 3x \lg^4 3x}.$ 11.10. $\int \frac{\sqrt{\operatorname{ctg} 7x}}{\sin^2 7x} dx.$
- 11.11. $\int \frac{\sqrt[5]{\operatorname{ctg} 3x}}{\sin^2 3x} dx.$ 11.12. $\int \frac{\lg^4 7x}{\cos^2 7x} dx.$
- 11.13. $\int \frac{\operatorname{ctg}^5 6x}{\sin^2 6x} dx.$ 11.14. $\int \frac{\sqrt[3]{\lg^5 4x}}{\cos^2 4x} dx.$
- 11.15. $\int \frac{\operatorname{ctg}^4 3x}{\sin^2 3x} dx.$ 11.16. $\int \frac{dx}{\cos^2 4x \sqrt{\lg 4x}}.$
- 11.17. $\int \frac{dx}{\sin^2 3x \operatorname{ctg}^3 3x}.$ 11.18. $\int \frac{\lg 6x}{\cos^2 6x} dx.$
- 11.19. $\int \frac{dx}{\sin^2 x \operatorname{ctg}^3 x}.$ 11.20. $\int \frac{\sqrt{\operatorname{ctg} 4x}}{\sin^2 4x} dx.$

$$11.21. \int \frac{\operatorname{ctg}^5 4x}{\sin^2 4x} dx.$$

$$11.22. \int \frac{\sqrt[3]{\operatorname{tg} 7x}}{\cos^2 7x} dx.$$

$$11.23. \int \frac{\sqrt[5]{\operatorname{tg}^2 3x}}{\cos^2 3x} dx.$$

$$11.24. \int \frac{\sqrt{\operatorname{ctg}^3 5x}}{\sin^2 5x} dx.$$

$$11.25. \int \frac{dx}{\sin^2 x \sqrt[5]{\operatorname{ctg}^4 x}}.$$

$$11.26. \int \frac{dx}{\cos^2 x \sqrt[5]{\operatorname{tg}^2 x}}.$$

$$11.27. \int \frac{\operatorname{tg}^6 2x}{\cos^2 2x} dx.$$

$$11.28. \int \frac{\sqrt{\operatorname{ctg}^5 x}}{\sin^2 x} dx.$$

$$11.29. \int \frac{\sqrt[5]{\operatorname{ctg}^2 x}}{\sin^2 x} dx.$$

$$11.30. \int \frac{\operatorname{tg}^7 3x}{\cos^2 3x} dx.$$

$$12.1. \int \frac{\sqrt{\operatorname{arctg}^6 3x}}{1+9x^2} dx.$$

$$12.2. \int \frac{\sqrt[3]{\arcsin x}}{\sqrt{1-x^2}} dx.$$

$$12.3. \int \frac{\arccos^2 3x}{\sqrt{1-9x^2}} dx.$$

$$12.4. \int \frac{\arccos \operatorname{tg}^3 2x}{1+4x^2} dx.$$

$$12.5. \int \frac{\sqrt[3]{\arccos^2 x}}{\sqrt{1+x^2}} dx.$$

$$12.6. \int \frac{dx}{(1+x^2) \operatorname{arctg}^3 x}.$$

$$12.7. \int \frac{\arccos^3 x}{\sqrt{1-9x^2}} dx.$$

$$12.8. \int \frac{\sqrt[3]{\operatorname{arctg}^2 x}}{1+x^2} dx.$$

$$12.9. \int \frac{\arcsin^5 2x}{\sqrt{1-4x^2}} dx.$$

$$12.10. \int \frac{dx}{\sqrt{1-x^2} \arcsin^4 x}.$$

$$12.11. \int \frac{\arccos^3 2x}{\sqrt{1-4x^2}} dx.$$

$$12.12. \int \frac{\operatorname{arctg}^7 3x}{1+9x^2} dx.$$

$$12.13. \int \frac{\arccos 4x}{\sqrt{1-16x^2}} dx.$$

$$12.14. \int \frac{\arcsin^4 x}{\sqrt{1-x^2}} dx.$$

$$12.15. \int \frac{\arcsin^3 2x}{\sqrt{1-4x^2}} dx.$$

$$12.16. \int \frac{dx}{(1+x^2) \operatorname{arctg}^7 x}.$$

$$12.17. \int \frac{\sqrt[3]{\operatorname{arctg} 2x}}{1+4x^2} dx.$$

$$12.18. \int \frac{\arccos^6 3x}{1+9x^2} dx.$$

$$12.19. \int \frac{\sqrt{\operatorname{arctg}^3 x}}{1+x^2} dx.$$

$$12.20. \int \frac{dx}{(1+x^2) \sqrt{\operatorname{arctg} x}}.$$

$$12.21. \int \frac{dx}{(1+x^2) \operatorname{arctg}^5 x}.$$

$$12.22. \int \frac{\arccos^7 x dx}{\sqrt{1-x^2}}.$$

$$12.23. \int \frac{\sqrt[3]{\arccos 2x}}{\sqrt{1-4x^2}} dx.$$

$$12.24. \int \frac{\operatorname{arctg}^4 5x}{1+25x^2} dx.$$

$$12.25. \int \frac{\arcsin^2 5x}{\sqrt{1-25x^2}} dx.$$

$$12.26. \int \frac{dx}{\sqrt{1-25x^2} \arcsin 5x}.$$

$$12.27. \int \frac{\operatorname{arctg}^8 3x}{1+9x^2} dx.$$

$$12.28. \int \frac{\arccos^2 7x}{\sqrt{1-49x^2}} dx.$$

$$12.29. \int \frac{\sqrt[5]{\operatorname{arctg}^3 x}}{1+x^2} dx.$$

$$12.30. \int \frac{\operatorname{arctg}^4 8x}{1+64x^2} dx.$$

$$13.1. \int \frac{x dx}{e^{3x^2+4}}.$$

$$13.2. \int \frac{x dx}{e^{x^2+3}}.$$

$$13.3. \int \frac{x^2 dx}{e^{x^2+1}}.$$

$$13.4. \int e^{\cos x} \sin x dx.$$

$$13.5. \int e^{2x^3-1} x^2 dx.$$

$$13.6. \int \frac{\sin x}{e^{\cos x}} dx.$$

$$13.7. \int e^{7x^2+2} x dx.$$

$$13.8. \int e^{3-x^2} x dx.$$

$$13.9. \int e^{4x^2+5} x dx.$$

- 13.10. $\int \frac{dx}{\sqrt{1-x^2} e^{\arcsin x}}.$ 13.11. $\int e^{5x^2-3} x dx.$
 13.12. $\int e^{1-4x^2} x dx.$ 13.13. $\int e^{3x^2+4} x dx.$
 13.14. $\int e^{\sin x+1} \cos x dx.$ 13.15. $\int e^{4-x^2} x dx.$
 13.16. $\int e^{\lg x} \frac{1}{\cos^2 x} dx.$ 13.17. $\int e^{3 \cos x+2} \sin x dx.$
 13.18. $\int e^{4 \sin x-1} \cos x dx.$ 13.19. $\int e^{5x^2-3} x dx.$
 13.20. $\int e^{5-2x^2} x dx.$ 13.21. $\int e^{4-3x^2} x dx.$
 13.22. $\int e^{\cos 2x} \sin 2x dx.$ 13.23. $\int e^{1-6x^2} x dx.$
 13.24. $\int e^{x^3+1} x^2 dx.$ 13.25. $\int \frac{e^{\arctg x}}{1+x^2} dx.$
 13.26. $\int e^{3x^3} x^2 dx.$ 13.27. $\int \frac{x^4 dx}{e^{x^5+1}}.$
 13.28. $\int \frac{x dx}{e^{x^2-3}}.$ 13.29. $\int \frac{x dx}{e^{2x^2+1}}.$ 13.30. $\int e^{4-5x^2} x dx.$

