

1430. $\ln|x+1| + \sqrt{x^2+4} + C$. 1431. $3 \ln \frac{\sqrt{x^2-2x+5}}{|x|} + 2 \operatorname{arctg} \frac{x-1}{2} + C$.
1432. $\frac{1}{24} \ln \frac{(x+2)^2}{x^2-2x+4} + \frac{1}{4\sqrt{3}} \operatorname{arctg} \frac{x-1}{\sqrt{3}} + C$. 1433. $\ln \frac{\sqrt{x^2+1}}{|x+1|} - \frac{1}{x+1} + \operatorname{arctg} x + C$. 1434. $\frac{1}{2b^2} \left(\operatorname{arctg} \frac{x}{b} + \frac{bx}{x^2+b^2} \right) + C$;
 $-\frac{1}{x+1} + \operatorname{arctg} x + C$.
- 2) $\frac{1}{8b^2} \left[\frac{x(5b^2+3x^2)}{(x^2+b^2)^2} + \frac{3}{b} \operatorname{arctg} \frac{x}{b} \right] + C$. 1435. $\frac{1}{8} \frac{x+9}{x^2+2x+5} - \frac{1}{16} \operatorname{arctg} \frac{x+1}{2} + C$; 2) $\frac{1}{8} \left[\frac{(x-3)(3x^2-18x+32)}{(x^2-6x+10)^2} + 3 \operatorname{arctg} (x-3) \right] + C$.
1436. $\ln \frac{\sqrt{x^2+1}}{|x+1|} + \frac{x-1}{x^2+1} + C$. 1437. $\frac{x-2}{4(x^2+2)} + \frac{\sqrt{2}}{8} \operatorname{arctg} \frac{x}{\sqrt{2}} + C$.
1438. $\frac{1}{a} \ln \left| \frac{x}{x+a} \right| + C$. 1439. $\frac{1}{a-b} \ln \left| \frac{x+b}{x+a} \right| + C$.
1440. $\frac{1}{2} \ln \left| 1 - \frac{2}{x} \right| + C$. 1441. $\frac{1}{10\sqrt{3}} \ln \left| \frac{x-\sqrt{3}}{x+\sqrt{3}} \right| - \frac{1}{5\sqrt{2}} \operatorname{arctg} \frac{x}{\sqrt{2}} + C$.
1442. $\frac{1}{x} + \frac{1}{2} \ln \left| \frac{x-1}{x+1} \right| + C$. 1443. $\frac{1}{4} \int \frac{4+x^2-x^2}{x(4+x^2)} dx = \frac{1}{4} \ln \frac{|x|}{\sqrt{4+x^2}} + C$. 1444. $\ln \frac{C(x-2)^2}{x-1}$.
1445. $\ln C(x-1)\sqrt{2x+3}$. 1446. $\ln \frac{C(x-1)^2}{(x+2)^2(x-2)}$.
1447. $3 \ln \frac{C(x-1)}{x+2} - \frac{2}{x+2}$. 1448. $2 \ln \frac{C(x-2)}{x} - \frac{1}{x-2}$.
1449. $\ln \frac{|x|}{\sqrt{x^2-2x+2}} + 2 \operatorname{arctg} (x-1) + C$. 1450. $\frac{1}{a} \ln \frac{\sqrt{x^2+a^2}}{|x|} + \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$. 1451. $\frac{1}{3} \ln \frac{|x+1|}{\sqrt{x^2+2}} + \frac{1}{3\sqrt{2}} \operatorname{arctg} \frac{x}{\sqrt{2}} + C$.
1452. $\frac{1}{24} \ln \frac{(x-2)^2}{x^2+2x+4} - \frac{1}{4\sqrt{3}} \operatorname{arctg} \frac{x+1}{\sqrt{3}} + C$.
1453. $-\frac{1}{2} \left[\frac{x+2}{x^2+2x+2} + \operatorname{arctg} (x+1) \right] + C$.
1454. $\frac{1}{5} \ln \left| \frac{x}{x+5} \right| + C$. 1455. $\frac{1}{3} \int \frac{x^2+3-x^2}{x^2(x^2+3)} dx =$
 $= -\frac{1}{3x} - \frac{1}{3\sqrt{3}} \operatorname{arctg} \frac{x}{\sqrt{3}} + C$. 1456. $\frac{1}{2} \int \frac{x^2+1-(x^2-1)}{(x^2+1)(x^2-1)} dx =$
 $= \frac{1}{4} \ln \left| \frac{x-1}{x+1} \right| - \frac{1}{2} \operatorname{arctg} x + C$. 1457. $\frac{1}{3} \int \frac{x^2+1-(x^2-2)}{(x^2+1)(x^2-2)} dx =$
 $= \frac{1}{6\sqrt{2}} \ln \left| \frac{x-\sqrt{2}}{x+\sqrt{2}} \right| - \frac{1}{3} \operatorname{arctg} x + C$. 1458. $\frac{x+2}{5} \sqrt{(3x+1)^2} + C$.