

ULESANNETE VASTUSED

1033. $\frac{x^8}{8} + \frac{7x}{\ln 7} - 7x + C$.
1034. $\frac{x^4}{2} - 3x\sqrt{x^2} - \frac{3}{16x^4} - x + C$. 1035. $\frac{2}{5}x^2\sqrt{x} - \frac{8}{3}x\sqrt{x} - 8\sqrt{x} + C$.
1036. $-\cot x - x + C$. 1037. $-3\cot x + 2\cos x + C$. 1038. $\frac{x^3}{3} + \arctan x + C$.
1039. $x - \frac{1}{5x^5} + C$. 1040. $x - \arctan x + C$. 1041. $2\arcsin \sqrt{x} + C$.
1042. $C - 2\cot(\arcsin \sqrt{x})$. 1043. $C - \arcsin \frac{1}{x}$. 1044. $C - \frac{\sqrt{a^2 - x^2}}{a^2x}$.
1045. $\frac{2}{3}\arctan \sqrt{x^3 - 1} + C$. 1046. $\frac{3}{4}\sqrt[3]{x}(\sqrt[3]{x} - 1) + \frac{3}{8}\ln|2\sqrt[3]{x} + 1| + C$.
1047. $\sqrt{1+x^2} + C$. 1048. $\frac{\ln \tan x}{2}(4 + \ln \tan x) + C$. 1049. $\frac{1}{2}\ln|3x^4 - 2x^3 - x^2 + 4x - 5| + C$.
1050. $C - \frac{1}{3}\ln|5 - e^{3x}|$. 1051. $x - \ln(1 + ex) + C$. 1052. $C - \ln|\cos x|$.
1053. $\frac{1}{2}(\arcsin x)^2 + C$. 1054. $\frac{5}{2}(\arctan x)^2 + C$.
1055. $\frac{\tan^2 x}{2} + C$. 1056. $\frac{(2\sqrt{x} + x)^2}{2} + C$. 1057. $C - \frac{1}{6(1+2t^2)}$.
1058. $\arcsin(\ln x) + C$. 1059. $\frac{1}{3}(x^2 + 5)^{\frac{3}{2}} + C$. 1060. $\frac{2}{5}\tan x^5 + C$.
1061. $C - \frac{4}{7}(1 - \arctan x)^{\frac{1}{2}}$. 1062. $C - \frac{5}{16}\sqrt[5]{(3-x^4)^4}$. 1063. $\frac{3}{5}\sqrt[3]{(\tan x - 3)^5} + C$.
1064. $C - \frac{1}{6\sin^6 x}$. 1065. $\frac{(3x-7)^{16}}{48} + C$. 1066. $C - \frac{2}{3}\sqrt{2-3x}$.
1067. $\frac{e^{ax+b}}{a} + C$. 1068. $\frac{a^{mx+n}}{m \ln a} + C$. 1069. $\frac{1}{3}\operatorname{ch}(3x-2) + \frac{1}{2}\operatorname{sh} 2x + C$.
1070. $\frac{1}{a}\arcsin(ax+b) + C$. 1071. $\frac{1}{\sqrt{3}}\arcsin \sqrt{3}x + C$.
1072. $\frac{1}{a}\arctan(ax+b) + C$. 1073. $\frac{1}{2}\arctan \frac{x+3}{2} + C$.
1074. $\frac{2}{\sqrt{47}}\arctan \frac{4x-3}{\sqrt{47}} + C$. 1075. $\frac{1}{\sqrt{6}}\arctan \frac{x+2}{\sqrt{6}} + \ln(x^2 + 4x + 10) + C$.
1076. $3\sqrt{5}\arctan \frac{2x-3}{\sqrt{5}} + 2\ln(2x^2 - 6x + 7) + C$.
1077. $\frac{1}{3}\tan(3x-2) + C$. 1078. $\frac{1}{2}\arctan 2x + C$. 1079. $\ln|\arctan x - 1| + C$.
1080. $\frac{5}{3}\sqrt[5]{(\ln x + 2)^3} + C$. 1081. $-\arctan(3-x) + C$. 1082. $\sqrt{2x-3} - 7\ln(\sqrt{2x-3} + 7) + C$.
1083. $\frac{1}{4}e^{4x} + \frac{5^{2x}}{2\ln 5} + \frac{2}{3 \cdot 7^{3x} \ln 7} + C$. 1084. $C - \frac{1}{10(5x+1)^2} - \frac{3}{32}\sqrt[3]{(7-8x)^4}$.
1085. $\frac{5}{8}(7 - \cos x)^{\frac{5}{2}} + C$. 1086. $\arcsin(x-3) + C$.
1087. $\frac{\arctan^3 x}{3} - 3\arctan x + C$. 1088. $\ln(5 + \arcsin x) + C$.
1089. $\ln|\ln(\ln x)| + C$. 1090. $3\arcsin x + 7\sqrt{1-x^2} + C$.
1091. $(5-2x)\cos x + 2\sin x + C$. 1092. $x\sin x + \cos x + \frac{\sin^2 x}{2} + C$. Enne integreerimist teisendada integreeritav funktsioon summaks.
1093. $-e^{-x}(x+1) + C$. 1094. $x\tan x + \ln|\cos x| + C$.
1095. $x\arcsin x + \sqrt{1-x^2} + C$. 1096. $x\arctan x - \frac{1}{2}\ln(1+x^2) + C$.
1097. $\frac{x^{n+1}\ln x}{n+1} - \frac{x^{n+1}}{(n+1)^2} + C$. 1098. $-\frac{1}{x}(\ln x + 1) + C$.
1099. $\frac{e^x}{2}(\sin x - \cos x) + C$. $\frac{e^x}{2}(\sin x + \cos x) + C$. 1100. $\frac{e^x}{3}(2\operatorname{sh} 2x - \operatorname{ch} 2x) + C$.
1101. $\frac{e^{4x}}{4}\left(x^3 - \frac{3}{4}x^2 - \frac{47}{16}x + \frac{53}{32}\right) + C$. 1102. $\frac{x^2}{2}\ln x - \frac{x^2}{4} - \frac{\ln^2 x}{2} + C$.
1103. $(x^2+2)\operatorname{ch} x - 2x\operatorname{sh} x + C$. 1104. $e^x(x^3 - 3x^2 + 6x - 6) + C$.
1105. $\frac{1}{4}\ln\left|\frac{x-3}{x+1}\right| + C$. 1106. $\frac{3}{8}\ln\left|\frac{x-1}{x+1}\right| + \frac{3x+4}{4(x+1)^2} + C$.
1107. $\ln\left|\frac{x-3}{x-2}\right| + C$. 1108. $-\ln|x| + \frac{7}{2}\ln|x-1| - 4\ln|x-2| + \frac{3}{2}\ln|x-3| + C$.
1109. $\frac{3}{2}\ln|x-1| - \frac{9}{2}\ln|x+1| + 4\ln|x+2| + C$. 1110. $\frac{1}{4}\ln\left|\frac{x^8}{(x-1)^3(x+1)^5}\right| - \frac{x+3}{2(x^2-1)} + C$.
1111. $27\ln\left|\frac{x-1}{x-2}\right| - \frac{38}{x-2} + C$. 1112. $\ln|x-1| - \frac{4x-5}{2(x-1)^2} + C$.
1113. $\frac{x^3}{3} + \frac{x^2}{2} + 13x - \frac{3}{10}\ln|x| + \frac{1348}{25}\ln|x-5| + \frac{61}{6}\ln|x+2| + C$.
1114. $\frac{x^2}{2} - \ln|x-1| + \frac{22}{5}\ln|x-2| + \frac{23}{5}\ln|x+3| + C$.
1115. $\frac{x^3}{3} + \ln|x^2-1| + C$. 1116. $\frac{x^2}{2} + \ln\left|\frac{x^2-1}{x}\right| + C$.
1117. $\frac{1}{9}\ln|x-1| + \frac{62}{9}\ln|x+2| - 6\ln|x+3| + \frac{19}{3(x+2)} + C$.
1118. $264\ln|x+3| - 263\ln|x+4| + \frac{99}{x+3} + \frac{181}{x+4} + C$.
1119. $\frac{x^4}{4} + \ln|x-1| - \ln|x+1| - \frac{2}{x+1} + C$. 1120. $\frac{11x-8}{9(x-1)(x+2)} + \frac{11}{27}\ln|x-1| + \frac{16}{27}\ln|x+2| + C$.
1121. $\frac{1}{6}\ln|x-1| + \frac{5}{2}\ln|x+1| - \frac{8}{3}\ln|x+2| + C$.
1122. $\ln|1+x| + 2\ln|x-1| - \ln|x-2| - \frac{2}{x-2} + C$.
1123. $C - \frac{1}{196(x+1)^{196}} + \frac{3}{197(x+1)^{197}} - \frac{3}{198(x+1)^{198}} + \frac{1}{199(x+1)^{199}}$.
1124. $\frac{1}{99(1-x)^{99}} - \frac{1}{49(1-x)^{98}} + \frac{1}{97(1-x)^{97}} + C$.
1125. $\frac{1}{4\sqrt{2}}\arctan \frac{4x-1}{\sqrt{2}} + C$.
1126. $\frac{1}{2}\ln(x^2+4x+7) - \frac{5}{\sqrt{3}}\arctan \frac{x+2}{\sqrt{3}} + C$.
1127. $\ln(4x^2+12x+11) - \frac{9}{2\sqrt{2}}\arctan \frac{2x+3}{\sqrt{2}} + C$.
1128. $\frac{x^2}{2} - x + \frac{2}{\sqrt{3}}\arctan \frac{2x+1}{\sqrt{3}} + C$.
1129. $x + \ln(x^2-x+1) + \frac{2}{\sqrt{3}}\arctan \frac{2x-1}{\sqrt{3}} + C$.
1130. $x - \ln(x^2+2x+5) - \frac{3}{2}\arctan \frac{x+2}{2} + C$.
1131. $\frac{1}{3}\ln\left|\frac{|x+1|}{\sqrt{x^2-x+1}}\right| + \frac{1}{\sqrt{3}}\arctan \frac{2x-1}{\sqrt{3}} + C$.
1132. $-\frac{1}{3x} - \frac{\sqrt{6}}{9}\arctan \sqrt{\frac{2}{3}}x + C$.
1133. $2\ln|x+3| + \frac{5}{2}\ln(x^2+25) - \frac{1}{5}\arctan \frac{x}{5} + C$.
1134. $-\frac{1}{(x-1)^2} - \ln|x-1| + \frac{1}{2}\ln(x^2+1) + \arctan x + C$.
1135. $\frac{1}{18}\ln(4x^2+5) + \frac{2}{9\sqrt{5}}\arctan \frac{2x}{\sqrt{5}} - \frac{1}{9}\ln|1-x| + C$.
1136. $\frac{1}{8}\ln|x^2-1| + \frac{3}{8}\ln(x^2+3) + C$.
1137. $-\frac{1}{10x^2} + \frac{3}{25x} + \frac{2}{125}\ln \frac{x^2}{x^2+3x+5} + \frac{18}{125\sqrt{11}}\arctan \frac{2x+3}{\sqrt{11}} + C$.
1138. $\frac{1}{4}\ln \frac{x^2+x+1}{x^2-x+1} + \frac{1}{2\sqrt{3}}\left(\arctan \frac{2x+1}{\sqrt{3}} + \arctan \frac{2x-1}{\sqrt{3}}\right) + C$.
- Nimetaja teguriteks lahutamiseks võib kasutada teisendust $x^4+x^2+1 = x^4+2x^2+1-x^2 = (x^2+1)^2-x^2$.
1139. $\frac{\sqrt{2}}{8}\ln \frac{x^2+\sqrt{2}x+1}{x^2-\sqrt{2}x+1} + \frac{1}{2\sqrt{2}}[\arctan(\sqrt{2}x+1) + \arctan(\sqrt{2}x-1)] + C$.
1140. $\frac{1}{4}\ln\left|\frac{x-1}{x+1}\right| + \frac{1}{2}\arctan x + C$.
1141. $\frac{x}{2(1+x^2)} + \frac{1}{2}\arctan x + C$.
1142. $\frac{x-1}{4(x^2+1)} + \frac{1}{8}\ln \frac{x^2+1}{(x+1)^2} + C$.
1143. $C - \frac{3}{2(x^2+1)} - \frac{2x}{1+x^2} - 2\arctan x$.
1144. $\frac{7x^5-11x}{32(x^4-1)^2} + \frac{21}{128}\ln\left|\frac{x-1}{x+1}\right| - \frac{21}{64}\arctan x + C$.
1145. $\frac{\sin 2x}{4} + \frac{x}{2} + C$.
1146. $C - \frac{\sin 2x}{4} + \frac{x}{2}$.
1147. $\frac{1}{8}(\sin 4x + 2\sin 2x + 3x) + C$.
1148. $\frac{\cos^3 x}{3} - \cos x + C$.
1149. $C - \cos x + \frac{2}{3}\cos^3 x - \frac{1}{5}\cos^5 x$.
1150. $\ln\left|\tan \frac{x}{2}\right| + C = \ln \sqrt{\frac{1-\cos x}{1+\cos x}} + C$.