

Uygun deęiřken deęiřtirmesi yaparak integralleri hesaplayınız:

$$7.44. \int \sqrt{3+x} dx. \quad 7.45. \int (3-4\sin x)^{1/3} \cos x dx.$$

$$7.46. \int \operatorname{ch} x \operatorname{sh} x dx. \quad 7.47. \int \frac{\sec^2 x}{\operatorname{tg}^4 x} dx.$$

$$7.48. \int \frac{dx}{x \ln^2 x}. \quad 7.49. \int \frac{dx}{a+bx}.$$

$$7.50. \int \frac{\sec^2 x}{a-b\operatorname{tg} x} dx. \quad 7.51. \int \frac{\cos(x/\sqrt{2})}{2-3\sin(x/\sqrt{2})} dx.$$

$$7.52. \int \operatorname{ctg} x dx. \quad 7.53. \int 3^{4x} dx.$$

$$7.54. \int \cos(ax+b) dx. \quad 7.55. \int \sin(\ln x) \frac{dx}{x}.$$

$$7.56. \int \sin \sqrt{x} \cdot \frac{dx}{\sqrt{x}}. \quad 7.57. \int \frac{dx}{\cos(x-\pi/4)}.$$

$$7.58. \int \frac{dx}{\operatorname{sh}^2 3x}. \quad 7.59. \int \frac{x}{\sqrt[3]{x^2-1}} dx.$$

$$7.60. \int x \cdot 5^{-x^2} dx. \quad 7.61. \int \frac{dx}{1-4x^2}.$$

$$7.62. \int \frac{e^{-ax}}{1+e^{-2ax}} dx. \quad 7.63. \int \frac{dx}{\sqrt{5-3x^2}}.$$

$$7.64. \int \frac{dx}{\sqrt{9x^2-1}}. \quad 7.65. \int \frac{\sin x dx}{\sqrt{\cos^2 x+4}}.$$

$$7.66. \int \frac{x^3 dx}{x^8+1}. \quad 7.67. \int \frac{x dx}{\sqrt{x^4+1}}.$$

$$7.68. \int \frac{dx}{a^2+b^2x}. \quad 7.69. \int \frac{\sin ax}{\cos^3 ax} dx.$$

$$7.70. \int \operatorname{ch}^2 x \operatorname{sh} x dx. \quad 7.71. \int \frac{e^x}{(7-e^x)^2} dx.$$

$$7.72. \int \operatorname{tg} x dx. \quad 7.73. \int \operatorname{cth} 4x dx.$$

$$7.74. \int \frac{a^{1/x}}{x^2} dx. \quad 7.75. \int \frac{x dx}{\operatorname{ch}^2(x^2+1)}.$$

$$7.76. \int \frac{dx}{(a-b)x^2-(a+b)} \quad (0 < b < a).$$

$$7.77. \int \frac{dx}{4x^2+7}. \quad 7.78. \int \frac{x dx}{4x^2+7}.$$

$$7.79. \int \frac{x^2 dx}{\sqrt{x^6+1}}. \quad 7.80. \int \frac{a^x}{\sqrt{a^{2x}-1}} dx.$$

Değişik yöntemler uygulayarak integralleri hesaplayınız:

$$\begin{array}{ll}
7.81^*. \int \frac{x-1}{(x+2)^2} dx. & 7.82. \int \frac{x^2}{3+x^2} dx. \\
7.83. \int \frac{x^2-2x+3}{x^2-4} dx. & 7.84. \int \frac{x dx}{a^2 x^4 - b^2}. \\
7.85. \int \frac{x^3}{9-4x^8} dx. & 7.86. \int \frac{x^4+1}{x^5+5x-8} dx. \\
7.87. \int x^3 \sqrt[4]{5x^4-3} dx. & \\
7.88. \int \left(3 - \frac{x}{\sqrt{x^2+1}}\right) \frac{dx}{\sqrt{x^2+1}}. & \\
7.89. \int \frac{x+1}{\sqrt{1-4x^2}} dx. & 7.90. \int \frac{a^2 + \sqrt{a^2 + b^2 x^2}}{a^2 + b^2 x^2} dx. \\
7.91. \int \frac{dx}{\sqrt[5]{a^x}}. & 7.92. \int e^x \sqrt[3]{4+e^x} dx. \\
7.93. \int \frac{e^x}{\sqrt{e^{2x}+4}} dx. & 7.94^*. \int \frac{dx}{2^x+1}. \\
7.95. \int \frac{e^{\arcsin x} + x+1}{\sqrt{1-x^2}} dx. & 7.96. \int \frac{x e^{\sqrt{x^2-1}}}{\sqrt{x^2-1}} dx. \\
7.97. \int \sqrt{3-\operatorname{ch} x} \operatorname{sh} x dx. & 7.98. \int \frac{dx}{x \sqrt{1-4 \ln x}}. \\
7.99. \int \frac{dx}{x \sqrt{1-4 \ln^2 x}}. & 7.100^*. \int \sin^2 x dx. \\
7.101^*. \int \cos^2 x dx. & 7.102. \int \frac{dx}{\sin(x/\sqrt{2})}. \\
7.103. \int (\sin ax + \cos ax)^2 dx. & 7.104. \int \frac{x^2}{\cos(x^3)} dx. \\
7.105. \int \frac{(1+\cos 2x)^3}{\cos 2x} dx. & 7.106. \int \frac{\sin 2x}{\sqrt{3-\cos^2 x}} dx. \\
7.107. \int \frac{\sin 2x}{\sqrt{\cos^4 x+3}} dx. & 7.108^*. \int \frac{dx}{\sin x \cos x}. \\
7.109. \int \frac{dx}{\operatorname{ctg} \sqrt{3} x}. & 7.110. \int \operatorname{th} ax dx. \\
7.111. \int \operatorname{tg}^2(ax+b) dx. & 7.112. \int x^2 \operatorname{ctg}^2(x^3-3) dx. \\
7.113. \int e^{\sec x} \operatorname{tg} x \sec x dx. &
\end{array}$$

Gösterilen deęiřtirmeleri uygulayarak integralleri bulunuz:

$$7.114. \int \frac{dx}{x\sqrt{1-x^3}}, \quad x = (1-t^2)^{1/3}.$$

$$7.115. \int \frac{dx}{x\sqrt{4-x^2}}, \quad x = \frac{2}{t}.$$

$$7.116. \int \frac{dx}{x+\sqrt{x}}, \quad x = t^2.$$

$$7.117. \int \frac{e^{2x}}{e^x+1} dx, \quad x = \ln t.$$

Uygun deęiřken deęiřtirmesi yaparak integralleri hesaplayınız:

$$7.118. \int x(5x-1)^{19} dx. \quad 7.119. \int \frac{e^{3x}}{\sqrt{1-e^x}} dx.$$

$$7.120. \int \frac{x+2}{\sqrt{x+1}+1} dx. \quad 7.121. \int \frac{x}{(3-x)^7} dx.$$

$$7.122. \int \frac{dx}{\sqrt{3+e^x}}. \quad 7.123. \int \frac{dx}{x\sqrt{x^2+1}}.$$

Kısmi integrasyon yöntemiyle integralleri hesaplayınız:

$$7.124. \int \arccos x dx. \quad 7.125. \int x \cos x dx.$$

$$7.126. \int x \ln x dx. \quad 7.127. \int \frac{\ln x}{\sqrt[3]{x}} dx.$$

$$7.128. \int (x^2-x+1) \ln x dx. \quad 7.129. \int x^2 \sin x dx.$$

$$7.130. \int x^2 e^{-x} dx. \quad 7.131. \int x^3 e^x dx.$$

$$7.132^*. \int x^3 e^{-x^2} dx. \quad 7.133. \int \frac{\ln^2 x}{x^2} dx.$$

$$7.134. \int x \operatorname{arctg} x dx. \quad 7.135. \int \frac{x \sin x}{\cos^3 x} dx.$$

$$7.136. \int e^{ax} \cos bx dx. \quad 7.137. \int e^{\arccos x} dx.$$

$$7.138. \int \ln(x+\sqrt{1+x^2}) dx. \quad 7.139. \int x^3 \ln x dx.$$

$$7.140. \int x 3^x dx. \quad 7.141. \int (x^2-2x+3) \cos x dx.$$

$$7.142. \int \frac{x dx}{\cos^2 x}. \quad 7.143. \int \cos(\ln x) dx.$$

Değişik yöntemler uygulayarak integralleri hesaplayınız:

$$7.144^*. \int e^{\sqrt{x}} dx.$$

$$7.145. \int x(\operatorname{arctg} x)^2 dx.$$

$$7.146. \int \frac{\arcsin x}{x^2} dx.$$

$$7.147. \int x \operatorname{ctg}^2 x dx.$$

$$7.148. \int \frac{\cos^2 x}{e^x} dx.$$

$$7.149^*. \int \frac{x^2}{(x^2 + 1)^2} dx.$$

Integralleri bulunuz:

$$7.151^{**}. \int \sqrt{x^2 + a} dx.$$

$$7.152^{**}. \int \frac{x^2}{\sqrt{a^2 - x^2}} dx.$$

$$7.153. \int x \arcsin x dx.$$

$$7.154. \int \frac{\ln(\ln x)}{x} dx.$$

$$7.155. \int x^2 \operatorname{arctg} x dx.$$

$$7.156. \int \frac{\arcsin \sqrt{x}}{\sqrt{1-x}} dx.$$

$$7.157^*. \int \sqrt{a^2 - x^2} dx.$$

Rasyonel kesrleri integralleyiniz.

1. Paydanın basit ve reel kökleri vardır:

$$2012. \int \frac{x dx}{(x+1)(2x+1)}.$$

$$2013. \int \frac{x dx}{2x^2-3x-2}.$$

$$2014. \int \frac{2x^2+41x-91}{(x-1)(x+3)(x-4)} dx.$$

$$2015. \int \frac{dx}{6x^3-7x^2-3x}.$$

$$2016. \int \frac{x^5+x^3-8}{x^3-4x} dx.$$

$$2017. \int \frac{x^3-1}{4x^3-x} dx.$$

$$2018. \int \frac{32x dx}{(2x-1)(4x^2-16x+15)}.$$

$$2019. \int \frac{x dx}{x^4-3x^2+2}.$$

$$2020. \int \frac{(2x^2-5) dx}{x^4-5x^2+6}.$$

$$2021. \int \frac{x^5-2x^4+3x^3-9x^2+4}{x^5-5x^3+4x} dx.$$

2. Paydanın basit veya katlı, reel kökleri vardır:

$$2022. \int \frac{(x^2-3x+2) dx}{x(x^2+2x+1)}.$$

$$2023. \int \frac{(x+2)^2 dx}{(x-1)^2 x}.$$

$$2024. \int \frac{x^2 dx}{x^3+5x^2+8x+4}.$$

$$2025. \int \frac{x^3+1}{x^3-x^2} dx.$$

$$2026. \int \frac{x^3-6x^2+11x-5}{(x-2)^4} dx.$$

$$2027. \int \frac{dx}{x^4-x^2}.$$

$$2028. \int \frac{x^2 dx}{(x+2)^2(x+4)^2}.$$

$$2029. \int \frac{x^3-6x^2+9x+7}{(x-2)^2(x-5)} dx.$$

$$2030. \int \frac{1}{8} \left(\frac{x-1}{x+1} \right)^4 dx.$$

$$2031. \int \frac{x^5 dx}{(x-1)^2(x^2-1)}.$$

$$2032. \int \frac{(x^2-2x+3) dx}{(x-1)(x^3-4x^2+3x)}.$$

$$2033. \int \frac{(7x^3-9) dx}{x^4-5x^3+6x^2}.$$

$$2034. \int \frac{x^3-2x^2+4}{x^3(x-2)^2} dx.$$

$$2035. \int \frac{3x^2+1}{(x^2-1)^3} dx.$$

3. Paydanın basit, kompleks kökleri vardır:

$$2036. \int \frac{dx}{x(x^2+1)}.$$

$$2038. \int \frac{x dx}{x^3-1}.$$

$$2040. \int \frac{(x^2+1) dx}{x^3-x^2+x-1}.$$

$$2042. \int \frac{dx}{(x^2+1)(x^2+x)}.$$

$$2044. \int \frac{(3x^2+x+3) dx}{(x-1)^2(x^2+1)}.$$

$$2046. \int \frac{(x^3-6) dx}{x^4+6x^2+8}.$$

$$2037. \int \frac{dx}{1+x^3}.$$

$$2039. \int \frac{(2x^2-3x-3) dx}{(x-1)(x^2-2x+5)}.$$

$$2041. \int \frac{x^2 dx}{1-x^4}.$$

$$2043. \int \frac{dx}{(x+1)^2(x^2+1)}.$$

$$2045. \int \frac{x^5+2x^3+4x+4}{x^4+2x^3+2x^2} dx.$$

$$2047*. \int \frac{dx}{1+x^4}.$$

1) $R\left(x, \sqrt[m]{\frac{ax+b}{a_1x+b_1}}, \sqrt[p]{\frac{ax+b}{a_1x+b_1}}, \dots\right)$ formunda fonksiyonun

integralini bulunuz:

$$2068. \int \frac{dx}{x(\sqrt{x}+\sqrt[3]{x^2})}.$$

$$2070. \int \frac{x dx}{(x+1)^{1/2}+(x+1)^{1/3}}.$$

$$2072. \int \sqrt{\frac{1-\sqrt{x}}{1+\sqrt{x}}} dx.$$

$$2074. \int \sqrt[3]{\frac{1-x}{1+x}} \frac{dx}{x}.$$

$$2069. \int \frac{dx}{\sqrt{x}+\sqrt[3]{x}+2\sqrt[4]{x}}.$$

$$2071. \int \sqrt{\frac{1-x}{1+x}} \frac{dx}{x}.$$

$$2073. \int \frac{x^2+\sqrt{1+x}}{\sqrt[3]{1+x}} dx.$$

$$2075*. \int \frac{dx}{\sqrt[4]{(x-1)^3(x+2)^3}}.$$

2) Binomiyel diferansiyelin $x^m(a+bx^n)^p dx$ integralini bulunuz:

$$2076. \int \sqrt{x}(1+\sqrt[3]{x})^4 dx.$$

$$2078. \frac{dx}{x\sqrt[4]{x^2+1}}.$$

$$2080. \int \frac{dx}{\sqrt[3]{1+x^3}}.$$

$$2082. \int \frac{\sqrt{1-x^4}}{x^5} dx.$$

$$2084. \int \frac{\sqrt[4]{1+\sqrt{x}}}{x} dx.$$

$$2086. \int \frac{\sqrt[3]{1+x^3}}{x^2} dx.$$

$$2088. \int \sqrt[3]{x(1-x^2)} dx.$$

$$2077. \int x^{-1} \left(1+x^{\frac{1}{3}}\right)^{-3} dx.$$

$$2079. \int x^5 \sqrt{(1+x^3)^2} dx.$$

$$2081. \int \frac{dx}{\sqrt[4]{1+x^4}}.$$

$$2083. \int \frac{\sqrt[3]{1+\sqrt[4]{x}}}{\sqrt{x}} dx.$$

$$2085. \int \frac{dx}{x\sqrt[3]{1+x^5}}.$$

$$2087. \int \frac{dx}{x^{11}\sqrt{1+x^4}}.$$

$$2089. \int \sqrt[3]{1+\sqrt[4]{x}} dx.$$

2090—2131 'de trigonometrik fonksiyonların integrallerini bulunuz:

$$2090. \int \sin^3 x \cos^2 x dx.$$

$$2092. \int \frac{dx}{\cos x \sin^3 x}.$$

$$2094. \int \frac{dx}{\cos^3 x \sin^3 x}.$$

$$2096. \int \frac{\sin x dx}{(1 - \cos x)^2}.$$

$$2098. \int \cos^6 x dx.$$

$$2100. \int \operatorname{tg}^5 x dx.$$

$$2102. \int \frac{dx}{\sin^3 x}.$$

$$2104. \int \frac{dx}{(\sin x + \cos x)^2}.$$

$$2106. \int \frac{dx}{a \cos x + b \sin x}.$$

$$2108. \int \frac{\cos^2 x dx}{\sin x \cos 3x}.$$

$$2110. \int \frac{dx}{5 - 3 \cos x}.$$

$$2112. \int \frac{2 - \sin x}{2 + \cos x} dx.$$

$$2114. \int \frac{dx}{4 + \operatorname{tg} x + 4 \operatorname{ctg} x}.$$

$$2116. \int \frac{dx}{5 - 4 \sin x + 3 \cos x}.$$

$$2118. \int \frac{dx}{1 + \sin^2 x}.$$

$$2120. \int \frac{dx}{a^2 \sin^2 x + b^2 \cos^2 x}.$$

$$2122. \int \frac{\cos x dx}{\sin^3 x - \cos^3 x}.$$

$$2091. \int \frac{\sin^3 x}{\cos^4 x} dx.$$

$$2093. \int \frac{\sin^4 x}{\cos^2 x} dx.$$

$$2095. \int \frac{dx}{\sin^4 x \cos^4 x}.$$

$$2097. \int \frac{\cos x dx}{(1 - \cos x)^2}.$$

$$2099. \int \operatorname{ctg}^4 x dx.$$

$$2101. \int \frac{dx}{\operatorname{tg}^6 x}.$$

$$2103. \int \frac{\cos^4 x + \sin^4 x}{\cos^2 x - \sin^2 x} dx.$$

$$2105. \int \frac{dx}{\sin x + \cos x}.$$

$$2107. \int \frac{dx}{\operatorname{tg} x \cos 2x}.$$

$$2109. \int \frac{dx}{1 + \operatorname{tg} x}.$$

$$2111. \int \frac{dx}{5 + 4 \sin x}.$$

$$2113. \int \frac{\sin^2 x dx}{1 - \operatorname{tg} x}.$$

$$2115. \int \frac{dx}{(\sin x + 2 \sec x)^2}.$$

$$2117. \int \frac{dx}{4 - 3 \cos^2 x + 5 \sin^2 x}.$$

$$2119. \int \frac{dx}{1 - \sin^4 x}.$$

$$2121. \int \frac{dx}{\sin^2 x + \operatorname{tg}^2 x}.$$

$$2123. \int \sqrt{1 + \sin x} dx.$$

$$2125^*. \int \frac{\sqrt{\sin^3 2x}}{\sin^3 x} dx.$$

$$2127. \int \frac{dx}{\sqrt{1 - \sin^4 x}}.$$

$$2129. \int \frac{(\cos 2x - 3) dx}{\cos^4 x \sqrt{4 - \operatorname{ctg}^2 x}}.$$

$$2131. \int \sqrt{\operatorname{tg} x} dx.$$

$$2124. \int \frac{\sqrt{\operatorname{tg} x}}{\sin x \cos x} dx.$$

$$2126. \int \frac{dx}{\sqrt[4]{\sin^3 x \cos^5 x}}.$$

$$2128. \int \sqrt{1 + \operatorname{cosec} x} dx.$$

$$2130. \int \frac{dx}{\sin \frac{x}{2} \sqrt{\cos^3 \frac{x}{2}}}.$$

Hiperbolik fonksiyonların integrallerini bulunuz:

$$2132. \int \operatorname{ch} x \, dx.$$

$$2133. \int \operatorname{sh} x \, dx.$$

$$2134. \int \frac{dx}{\operatorname{ch}^2 x}.$$

$$2135. \int \frac{e^x dx}{\operatorname{ch} x + \operatorname{sh} x}.$$

$$2136. \int (\operatorname{ch}^2 ax + \operatorname{sh}^2 ax) dx.$$

$$2137. \int \operatorname{sh}^2 x \, dx.$$

$$2138. \int \operatorname{th}^2 x \, dx.$$

$$2139. \int \operatorname{cth}^2 x \, dx.$$

$$2141. \int \operatorname{ch}^3 x \, dx.$$

$$2142. \int \operatorname{th}^4 x \, dx.$$

$$2143. \int \operatorname{sh}^2 x \operatorname{ch}^3 x \, dx.$$

$$2144. \int \operatorname{cth}^5 x \, dx.$$

$$2145. \int \frac{dx}{\operatorname{sh} x \operatorname{ch} x}.$$

$$2146. \int \frac{dx}{\operatorname{sh} x}.$$

$$2147. \int \frac{dx}{(1 + \operatorname{ch} x)^2}.$$

$$2148. \int \sqrt{\operatorname{th} x} \, dx.$$

$$2149. \int \frac{x \, dx}{\operatorname{ch}^2 x}.$$

$$2150. \int \frac{e^{2x} dx}{\operatorname{sh}^4 x}.$$

x ve $\sqrt{ax^2 + bx + c}$ 'in rasyonel fonksiyonunun integralini bulunuz:

$$2151*. \int \frac{dx}{x \sqrt{x^2 + x + 1}}.$$

$$2152. \int \frac{dx}{x \sqrt{x^2 + 4x - 4}}.$$

$$2153. \int \frac{dx}{x \sqrt{x^2 + 2x - 1}}.$$

$$2154. \int \frac{dx}{x \sqrt{2 + x - x^2}}.$$

$$2155. \int \frac{\sqrt{2x + x^2}}{x^2} dx.$$

$$2156. \int \frac{dx}{(x-1) \sqrt{x^2 + x + 1}}.$$

$$2157. \int \frac{dx}{(2x-3) \sqrt{4x-x^2}}.$$

$$2158. \int \sqrt{x^2 - 2x - 1} \, dx.$$

$$2159. \int \sqrt{3x^2 - 3x + 1} \, dx.$$

$$2160. \int \sqrt{1 - 4x - x^2} \, dx.$$

$$2161. \int \frac{dx}{x - \sqrt{x^2 - x + 1}}.$$

$$2162. \int \frac{dx}{x^2 (x + \sqrt{1 + x^2})}.$$

$$2163. \int \frac{dx}{1 + \sqrt{x^2 + 2x + 2}}.$$

$$2164. \int \frac{x^2 dx}{\sqrt{1 - 2x - x^2}}.$$

$$2165. \int \frac{(2x^2 - 3x) dx}{\sqrt{x^2 - 2x + 5}}.$$

$$2166. \int \frac{3x^2 - 5x}{\sqrt{3 - 2x - x^2}} dx.$$

$$2167. \int \frac{3x^3 dx}{\sqrt{x^2 + 4x + 5}}.$$

$$2168. \int \frac{x^3 - x + 1}{\sqrt{x^2 + 2x + 2}} dx.$$

$$2169. \int \frac{3x^3 - 8x + 5}{\sqrt{x^2 - 4x - 7}} dx.$$

$$2170. \int \frac{x^4 dx}{\sqrt{x^2 + 4x + 5}}.$$

$$2171. \int \frac{dx}{(x^3 + 3x^2 + 3x + 1) \sqrt{x^3 + 2x - 3}}.$$

$$2172. \int \frac{\sqrt{1+x^2}}{2+x^2} dx.$$

$$2173. \int \frac{(x-1) dx}{x^2 \sqrt{2x^2 - 2x + 1}}.$$

$$2174. \int \frac{(2x+3) dx}{(x^2 + 2x + 3) \sqrt{x^2 + 2x + 4}}.$$

Çeşitli integralleri bulunuz:

$$2175. \int \frac{x^3 dx}{(x-1)^{12}}.$$

$$2177. \int x^3 \sqrt{a+x} dx.$$

$$2179. \int \frac{x \sqrt{1+x}}{\sqrt{1-x}} dx.$$

$$2181. \int \frac{dx}{1-x^4}.$$

$$2183. \int \frac{\ln(x+1) dx}{\sqrt{x+1}}.$$

$$2185. \int x^2 \operatorname{sh} x dx.$$

$$2187. \int \frac{\arcsin x dx}{x^2}.$$

$$2189. \int x e^{\sqrt[3]{x}} dx.$$

$$2191. \int \sin \sqrt{x} dx.$$

$$2193. \int \frac{dx}{x - \sqrt{x^2 - 1}}.$$

$$2194. \int \frac{\sqrt{(1+x^2)^6}}{x^8} dx.$$

$$2196. \int \sqrt{\frac{1 - \sqrt[3]{x}}{1 + \sqrt[3]{x}}} \frac{dx}{x}.$$

$$2198. \int \frac{\sqrt{2x+1}}{x^2} dx.$$

$$2200. \int \frac{dx}{\sin 2x - 2 \sin x}.$$

$$2202. \int \frac{dx}{a^2 - b^2 \cos^2 x}.$$

$$2204. \int \frac{(\ln x - 1) dx}{\ln^2 x}.$$

$$2206. \int x^2 e^x \cos x dx.$$

$$2208. \int \frac{dx}{\sqrt{\sin^3 x \cos^3 x}}.$$

$$2210. \int \frac{\sin 2x dx}{\cos^4 x + \sin^4 x}.$$

$$2212. \int \sqrt{\operatorname{tg}^2 x + 2} dx.$$

$$2214. \int \frac{dx}{(2x-3) \sqrt{4x-x^2}}.$$

$$2176. \int \frac{x dx}{x - \sqrt{x^2 - 1}}.$$

$$2178. \int \frac{dx}{ae^{mx} + be^{-mx}}.$$

$$2180. \int \frac{x^4 dx}{(x^2-1)(x+2)}.$$

$$2182. \int \frac{dx}{(x^4-1)^2}.$$

$$2184. \int (x^2 + 3x + 5) \cos 2x dx.$$

$$2186. \int \operatorname{arctg}(1 + \sqrt{x}) dx.$$

$$2188. \int e^{\sqrt[3]{x}} dx.$$

$$2190. \int (x^3 - 2x^2 + 5) e^{3x} dx.$$

$$2192. \int \frac{dx}{x^3 (x-1)^{1/2}}.$$

$$2195. \int \frac{x^4 dx}{\sqrt{x^2+1}}.$$

$$2197. \int \frac{dx}{x^3 \sqrt{(1+x)^4}}.$$

$$2199. \int \frac{x^4 dx}{x^{15} - 1}.$$

$$2201. \int \frac{dx}{1 + \cos^2 x}.$$

$$2203. \int x \ln(1+x^3) dx.$$

$$2205. \int \frac{x \ln x}{\sqrt{(x^2-1)^3}} dx.$$

$$2207. \int x e^{x^2} (x^2 + 1) dx.$$

$$2209. \int \frac{dx}{\sin^5 x \cos^3 x}.$$

$$2211. \int \frac{dx}{1 + \sin x + \cos x}.$$

$$2213. \int \frac{(x^2-1) dx}{x \sqrt{x^4 + 3x^2 + 1}}.$$

$$2215. \int \frac{x e^x dx}{(1+x)^2}.$$