

INTEGRATION MIX

Created by T. Madas

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

$$2. \int \frac{12}{\sqrt{3x+1}} dx$$

$$3. \int \frac{12x}{\sqrt{4x-1}} dx$$

$$4. \int \frac{12}{4x+1} dx$$

$$5. \int \frac{12x}{4x+1} dx$$

$$6. \int (\sin x + \cos x)^2 dx$$

$$7. \int (2\sin x + \operatorname{cosec} x)^2 dx$$

$$8. \int \frac{5}{(3x-1)(2x+1)} dx$$

$$9. \int 4x \sin 2x dx$$

$$10. \int \frac{7}{4x} dx$$

$$11. \int \left(x + \frac{2}{x}\right)^2 dx$$

$$12. \int \frac{10}{(1-4x)^{\frac{7}{2}}} dx$$

$$13. \int (1+2\cos x) \sin x dx$$

$$14. \int 2\cos^2 x - \cos\left(\frac{1}{2}x\right) dx$$

$$15. \int \frac{14x}{x^2-4} dx$$

$$16. \int \frac{9}{2x^2+x-1} dx$$

$$17. \int (8x+1)e^{-2x} dx$$

$$18. \int (e^{2x} + e^{-x})^2 dx$$

$$19. \int \frac{6}{(3x+2)^3} dx$$

$$20. \int \frac{6x}{(3x+2)^3} dx$$

$$21. \int (\sin x - 2\cos x) \sin x dx$$

$$22. \int \frac{(2+\cos x)\sin 2x}{2\cos x} dx =$$

$$23. \int \frac{8x-3}{4x} dx$$

$$24. \int \frac{6x^2}{x^3+8} dx$$

$$25. \int (1+2\cos x)^3 \sin x dx$$

$$26. \int \cos \sqrt{x} dx$$

$$27. \int \frac{3}{2x-1} dx$$

$$28. \int \frac{10}{(2x+1)^6} dx$$

$$29. \int \frac{3x-1}{(2x+1)(x-2)} dx$$

$$30. \int (2+\sin x)^2 dx$$

$$31. \int 5(2x-3)^{\frac{1}{4}} dx$$

$$32. \int \frac{e^{4x}+3}{e^{3x}} dx$$

$$33. \int x e^{5x} dx$$

$$34. \int \frac{x^3}{x^4+2} dx$$

$$35. \int \frac{2}{(x-2)(x-4)} dx$$

$$36. \int \frac{3}{4x+1} dx$$

$$37. \int \left(1+\frac{1}{x}\right)^2 dx$$

$$38. \int \frac{x}{(x^2-1)^3} dx$$

$$39. \int \cos x - \sin x dx$$

$$40. \int \sin x - \cos x dx$$

$$41. \int \sin(4x+3) dx$$

$$42. \int \frac{x}{\sqrt{x+1}} dx$$

$$43. \int \cos(5-2x) dx$$

$$44. \int 3 \sin 2x \, dx$$

$$45. \int (1 + \sec^2 x) \sin x \, dx$$

$$46. \int (1 - 2 \cos x)^2 \, dx$$

$$47. \int (1 + \cot^2 x) \sec^2 x \, dx$$

$$48. \int 2x \cos 3x \, dx$$

$$49. \int \frac{3}{(2+x)(1-x)} \, dx$$

$$50. \int 10(3x+1)^4 \, dx$$

$$51. \int 6(2x+1)^{\frac{1}{2}} \, dx$$

$$52. \int \frac{1}{\cos^2 x \tan^2 x} \, dx$$

$$53. \int \cos x \sin x \, dx$$

$$54. \int \frac{2}{\cos^2 x} \, dx$$

$$55. \int 2 + 2 \tan^2 x \, dx$$

$$56. \int \frac{1 + \cos x}{\sin^2 x} \, dx$$

$$57. \int \frac{(1 + \cos x)^2}{\sin^2 x} \, dx$$

$$58. \int x \sin 3x \, dx$$

$$59. \int \frac{2x}{(2x+1)^3} \, dx$$

$$60. \int (4 - 5x)^{-1} \, dx$$

$$61. \int \frac{1}{4x} \, dx$$

$$62. \int \frac{1}{(x+1)(x+2)} \, dx$$

$$63. \int \frac{x+1}{x} \, dx$$

$$64. \int \frac{x}{x+1} \, dx$$

$$65. \int \frac{4x}{\sqrt{1-2x^2}} \, dx$$

$$66. \int \frac{x+1}{9x^2-1} dx$$

$$67. \int x \sin 4x dx$$

$$68. \int \ln x dx$$

$$69. \int \frac{4}{(2x-7)^2} dx$$

$$70. \int 4 \cos^2 x dx$$

$$71. \int (1+\tan^2 x) \sec^2 x dx$$

$$72. \int (1+\tan x) \sec^2 x dx$$

$$73. \int \operatorname{cosec}^2(3x+1) dx$$

$$74. \int 12 \sec^2(2x+3) dx$$

$$75. \int \frac{\sin \sqrt{x}}{\sqrt{x}} dx$$

$$76. \int 6e^{2x+2} dx$$

$$77. \int (1-\cot^2 x) \sec^2 x dx$$

$$78. \int \frac{\sin x - \cos x}{\sin x + \cos x} dx$$

$$79. \int \sec x \tan x \sqrt{1+\sec x} dx$$

$$80. \int \tan 2x \sec 2x dx$$

$$81. \int x^2 \ln x dx$$

$$82. \int \frac{6}{x^2-2x-8} dx$$

$$83. \int 3 \cot^2 x dx$$

$$84. \int \cos 2x \sin x dx$$

$$85. \int \frac{\sqrt{x^2+4}}{x} dx$$

$$86. \int 7(2x-3)^{\frac{5}{2}} dx$$

$$87. \int \frac{x^2}{4-x^3} dx$$

$$88. \int x \sin\left(\frac{1}{2}x\right) dx$$

$$89. \int \frac{4}{4x^2 + 4x + 1} dx$$

$$90. \int \frac{3}{\sqrt{4x+1}} dx$$

$$91. \int \frac{x}{\sqrt{x-1}} dx$$

$$92. \int \frac{1}{3(x-2)^{\frac{1}{2}}} dx$$

$$93. \int \frac{6x+3}{2x} dx$$

$$94. \int \frac{4x+1}{2x-5} dx$$

$$95. \int \frac{4x}{x^2 - 1} dx$$

$$96. \int \frac{x^2}{2x-1} dx$$

$$97. \int \frac{1+\cos^4 x}{\cos^2 x} dx$$

$$98. \int \frac{17-5x}{(2x+3)(2-x)^2} dx$$

$$99. \int x \sin(2x-1) dx$$

$$100. \int 4(3x-2)^3 dx$$

$$101. \int \sqrt{x\sqrt{x}} dx$$

$$102. \int \frac{1}{x^2 \sqrt[3]{x^2}} dx = -\frac{3}{5} x^{-\frac{5}{3}} + C$$

$$103. \int \frac{3}{\sqrt{2-4x}} dx$$

$$104. \int \frac{1}{1+\cos 2x} dx$$

$$105. \int \frac{2}{2x-x^2} dx$$

$$106. \int \frac{\ln x}{x^2} dx$$

$$107. \int \frac{3x^2}{x^3+1} dx$$

$$108. \int \frac{2x+1}{2x-1} dx$$

$$109. \int \frac{14x+1}{(1-x)(2x+1)} dx$$

$$110. \int \frac{6x}{\sqrt{2x+3}} dx$$

$$111. \int \frac{\sin^4 x + \cos^2 x}{\sin^2 x} dx$$

$$112. \int \frac{2}{(x-4)\sqrt{x}} dx$$

$$113. \int \frac{1}{2+\sqrt{x-1}} dx$$

$$114. \int \frac{4}{\sqrt{6x-1}} dx$$

$$115. \int \frac{3e^{2x}}{e^{2x}-1} dx$$

$$116. \int x \sec^2 x dx$$

$$117. \int \operatorname{cosec} 2x \cot 2x dx$$

$$118. \int \tan^2 x \sec^2 x dx$$

$$119. \int \sin 2x \operatorname{cosec} x dx$$

$$120. \int (2 \cos x - 3 \sin x)^2 dx$$

$$121. \int \frac{\sin x + \tan x}{\cos x} dx$$

$$122. \int \frac{1+\sin x}{\cos^2 x} dx$$

$$123. \int e^{\sin x} \cos x dx$$

$$124. \int x^2 \sin x dx$$

$$125. \int (2x+1)^3 dx$$

$$126. \int \frac{\tan^4 x}{\cos^2 x} dx$$

$$127. \int \frac{4x^2 - 6x + 5}{(2-x)(2x-1)^2} dx$$

$$128. \int \frac{3x-1}{2x+3} dx$$

$$129. \int \frac{8x^2}{1-2x} dx$$

$$130. \int \frac{10}{(3x+1)^{\frac{3}{2}}} dx$$

$$131. \int 5^x dx$$

$$132. \int \sqrt{\sin x \cos^2 x} \, dx$$

$$140. \int \sin^2 x \sec^2 x \, dx$$

$$148. \int \sec^2 x \tan x \sqrt{1+\tan x} \, dx$$

$$133. \int (2x+1)\sin(x^2+x+1) \, dx$$

$$141. \int 3\sec^2 x \sin x \, dx$$

$$149. \int \frac{\sqrt{1+2\tan x}}{\cos^2 x} \, dx$$

$$134. \int (2x+1)(x^2+x+1) \, dx$$

$$142. \int \frac{1}{x(1+\ln x)^3} \, dx$$

$$150. \int \tan^2 x \, dx$$

$$135. \int (x+1)\cos(x^2+2x+1) \, dx$$

$$143. \int x^3 \ln x \, dx$$

$$151. \int \frac{(1+\sin x)^2}{\cos^2 x} \, dx$$

$$136. \int \frac{1}{2+\sqrt{x}} \, dx$$

$$144. \int x \ln(2x^3) \, dx$$

$$152. \int \frac{\cos^2 x}{1+\sin x} \, dx$$

$$137. \int \frac{1}{e^x + e^{-x} + 2} \, dx$$

$$145. \int 4-\cos^4 x \sin x \, dx$$

$$153. \int \frac{1}{1+\cos x} \, dx$$

$$138. \int x^2 \tan(x^3+1) \, dx$$

$$146. \int \frac{\cos x}{\sin^3 x} \, dx$$

$$154. \int \frac{\cos x}{\sqrt{\sin x}} \, dx$$

$$139. \int x^3 \ln(x^2+1) \, dx$$

$$147. \int \frac{4\sec^2 x}{\tan x} \, dx$$

$$155. \int \frac{10x^4}{2x^{\frac{5}{2}} + 1} dx$$

$$156. \int \sin \sqrt{x} dx$$

$$157. \int \frac{x^2}{1-2x} dx$$

$$158. \int \frac{12}{(1-2x)^5} dx$$

$$159. \int \frac{x^4 + 2x}{x^5 + 5x^2 + 8} dx$$

$$160. \int \frac{x}{x-1} dx$$

$$161. \int \frac{1}{(1+\sqrt{x})\sqrt{x}} dx$$

$$162. \int \frac{2x^3+1}{x^4+2x} dx$$

$$163. \int \frac{x+2}{x(x+1)} dx$$

$$164. \int \sin x \ln(\sec x) dx$$

$$165. \int \frac{(1+2\cos x)^2}{3\sin^2 x} dx$$

$$166. \int \frac{1}{x \ln x} dx$$

$$167. \int (2-3x)^{-2} dx$$

$$168. \int 2\sec^2 x + \frac{1}{2}\sin 2x dx$$

$$169. \int \frac{\ln x}{\sqrt{x}} dx$$

$$170. \int \frac{\cos^4 x}{\sin x} dx$$

$$171. \int 6\tan^2 x - \sec^2 x dx$$

$$172. \int 6\cos^4 x - 2\sin^2 x dx$$

$$173. \int \sin 4x \cos 4x dx$$

$$174. \int \frac{1}{\cosec x - \cot x} dx$$

$$175. \int \frac{x^2}{\sqrt{x-1}} dx$$

$$176. \int \frac{3e^{2x}}{\sqrt{e^x-1}} dx$$

$$177. \int \frac{1}{(2+\sqrt[3]{x})\sqrt[3]{x^2}} dx$$

$$178. \int \frac{4x^7}{x^4+1} dx$$

$$179. \int \frac{x}{9x^2+1} dx$$

$$180. \int \frac{2}{x+\sqrt[3]{x}} dx$$

$$181. \int \frac{3x}{1+\sqrt{x}} dx$$

$$182. \int \frac{3x^2+2}{4x+1} dx$$

$$183. \int \frac{3}{x} + \frac{4}{x^2} - \frac{2}{x^3} dx$$

$$184. \int 2\sin 2x \cos^2 x dx$$

$$185. \int \frac{10x^2-23x+11}{(2-3x)(2x-1)^2} dx$$

$$186. \int \frac{\sec x}{\sec x - \tan x} dx$$

$$187. \int x \cos 6x dx$$

$$188. \int \sin x \sin 3x dx$$

$$189. \int 4\cos 3x + \frac{1}{2}\sin 3x dx$$

$$190. \int \sin^2 6x dx$$

$$191. \int \frac{\cos 2x}{1-\cos^2 2x} dx$$

$$192. \int \frac{1}{\cos^2 x \tan^2 x} dx$$

$$193. \int 3\cos^3 3x dx$$

$$194. \int 3\sec^4 x dx$$

$$195. \int 2\sin x \cos 3x dx$$

$$196. \int \frac{2\sin x}{\cos x + \sin x} dx$$

$$197. \int \frac{4}{2x-1} + \frac{1}{3-4x} dx$$

$$198. \int x^2 \sin 3x dx$$

$$199. \int \operatorname{cosec}^2 2x dx$$

$$200. \int \sin^3 2x \cos 2x \, dx$$

$$201. \int \cot^2 3x \, dx$$

$$202. \int \frac{7}{3x} \, dx$$

$$203. \int \frac{\sin x \cos x}{\sqrt{1-\cos 2x}} \, dx$$

$$204. \int \frac{\sin x \cos x}{1+\cos 2x} \, dx$$

$$205. \int 4(3-2x)^5 \, dx$$

$$206. \int \frac{1+\sin x}{\cos x} \, dx$$

$$207. \int \sin 2x \sec x \, dx$$

$$208. \int \sin 2x \sin x \, dx$$

$$209. \int x \cos^2 x \, dx$$

$$210. \int \sin(x+1)^{\frac{1}{3}} \, dx$$

$$211. \int \frac{1-\ln x}{x^2} \, dx$$

$$212. \int 4x e^{-\frac{2}{3}x} \, dx$$

$$213. \int (e^x + x)^2 \, dx$$

$$214. \int \frac{e^{4x}-e^{-x}}{e^{2x}} \, dx$$

$$215. \int \frac{e^{\ln x}}{x} \, dx$$

$$216. \int \frac{1}{2(3x+1)^4} \, dx$$

$$217. \int \frac{\cos(\ln x)}{x} \, dx$$

$$218. \int \frac{4x e^{2x^2}}{\sqrt{1+2e^{2x^2}}} \, dx$$

$$219. \int \frac{4}{3(2x+1)} \, dx$$

$$220. \int \frac{1}{\cos^2 x \tan x} \, dx$$

$$221. \int \frac{\sin 2x}{1+\cos x} \, dx$$

$$222. \int \sin^3 x \, dx$$

$$223. \int \frac{1}{3} \sin 2x - \frac{1}{2} \cos 3x \, dx$$

$$224. \int \frac{3x}{\sqrt{4-2x^2}} \, dx$$

$$225. \int \frac{1}{\sin x \cos^2 x} \, dx$$

$$226. \int \frac{3x}{4-2x^2} \, dx$$

$$227. \int \frac{1-4x}{x(4x-\ln x)^2} \, dx$$

$$228. \int \frac{\sin x}{\cos^4 x} \, dx$$

$$229. \int \frac{\operatorname{cosec}^2 x}{1+\cot x} \, dx$$

$$230. \int x^2 \cos\left(\frac{1}{4}x\right) \, dx$$

$$231. \int \frac{3}{(\sqrt{x}-2)(\sqrt{x}+1)} \, dx$$

$$232. \int \frac{1}{(\sqrt{x}-2)(\sqrt{x}+2)} \, dx$$

$$233. \int \frac{4-3x}{2x+1} \, dx$$

$$234. \int \left(1 + \frac{1}{x}\right) \sqrt{x} \, dx$$

$$235. \int \frac{\sec x}{\cos x - \sin x} \, dx$$

$$236. \int \frac{x^2-2}{x^2-1} \, dx$$

$$237. \int \frac{1}{x^3-x^2} \, dx$$

$$238. \int \frac{6x^2}{2x^2-1} \, dx$$

$$239. \int \frac{1}{1+\sqrt{x-1}} \, dx$$

$$240. \int \frac{x+1}{x-5} \, dx$$

$$241. \int \frac{(x+2)^2}{3x} \, dx$$

$$242. \int 4e^{-2x} - \frac{1}{3} \sin 3x \, dx$$

$$243. \int 2x \sec^2 2x \, dx$$

$$244. \int \cos x \sin^8 x \, dx$$

$$245. \int \frac{\sin^5 x}{\cos^7 x} dx$$

$$246. \int \tan 3x dx$$

$$247. \int \frac{1}{\sec x - 1} dx$$

$$248. \int \frac{\sin^2 x}{\cos^4 x} dx$$

$$249. \int \frac{\sin x \cos x}{1 - \cos x} dx$$

$$250. \int \frac{(4x-1)^{-1}}{4} dx$$

$$251. \int \frac{e^{2x} - 2e^x}{e^x + 1} dx$$

$$252. \int \frac{2x^2 - 3x + 2}{x-1} dx$$

$$253. \int 1 - \cot^2 x dx$$

$$254. \int \frac{x^2 + 1}{x^4 - x^2} dx$$

$$255. \int \operatorname{cosec}^4 x dx$$

$$256. \int x^2 e^{\frac{1}{2}x} dx$$

$$257. \int (e^x + 2e^{-x})^2 dx$$

$$258. \int e^x \sin(e^x) dx$$

$$259. \int xe^2 dx$$

$$260. \int (2\cos x - 3)^2 dx$$

$$261. \int \frac{x^2}{x-2} dx$$

$$262. \int \frac{(x+1)e^{\frac{1}{x}}}{x^3} dx$$

$$263. \int \frac{\sqrt{4x+1}}{x} dx$$

$$264. \int \frac{1}{(1-x^2)^{\frac{3}{2}}} dx$$

$$265. \int \frac{2^x}{2^x + 1} dx$$

$$266. \int (2x-1)\sqrt{2x-3} dx$$

$$267. \int \frac{9x^5}{\sqrt{x^3+1}} dx$$

$$268. \int (3\sin x - \cos x)^2 dx$$

$$269. \int \frac{4x}{x^2-10} dx$$

$$270. \int \frac{4e^{3x}}{1-e^{3x}} dx$$

$$271. \int (1-\cos x)\sin x \cos x dx$$

$$272. \int (\tan x - 1)^2 dx$$

$$273. \int \frac{1+e^x}{1-e^x} dx$$

$$274. \int \sin 2x \cos^4 2x dx$$

$$275. \int \frac{1}{\sin x \cos x} dx$$

$$276. \int \frac{1}{\sin^2 x \cos x} dx$$

$$277. \int \frac{1}{1-\sin x} dx$$

$$278. \int \frac{1}{e^x+1} dx$$

$$279. \int (1+\sin x)\sin 2x dx$$

$$280. \int x \sec x \tan x dx$$

$$281. \int \sin 3x \cos 2x dx$$

$$282. \int \frac{1-2x}{x(2x-\ln x)^2} dx$$

$$283. \int x^2 e^{-\frac{1}{4}x} dx$$

$$284. \int \frac{x+4}{x-4} dx$$

$$285. \int 3x^2 (4-2x^3)^{\frac{3}{2}} dx$$

$$286. \int x \sqrt{x+1} dx$$

$$287. \int \frac{x+1}{\sqrt[3]{x^2+2x+3}} dx$$

$$288. \int \sin 2x \cos x dx$$

$$289. \int \sin 2x \cos 2x dx$$

$$290. \int \frac{3^x}{3^x+1} dx$$

$$291. \int \frac{\tan x}{\tan x - \sec x} dx$$

$$292. \int \frac{(\ln x)^2}{x} dx$$

$$293. \int \frac{8(x^2 + 1)}{(x-3)(x+1)^2} dx$$

$$294. \int \sqrt[3]{x} \sqrt{\frac{1}{x}} dx$$

$$295. \int (x+1)(x^2 + 2x - 1)^4 dx$$

$$296. \int \sin x \cos^4 x dx$$

$$297. \int \frac{2x+6}{x^2 + 6x + 1} dx$$

$$298. \int \frac{1}{x(x-4)} dx$$

$$299. \int \frac{\tan x}{\sqrt{1+\cos 2x}} dx$$

$$300. \int \cos^2 x \sin^2 x dx$$

$$301. \int \frac{3x^3 + 5x}{x^2 + 1} dx$$

$$302. \int \sin^2 2x dx$$

$$303. \int \frac{\cos 2x}{\cos^2 x} dx$$

$$304. \int \sec^3 x \tan x dx$$

$$305. \int x \left[(\ln x)^2 - 1 \right] dx$$

$$306. \int \frac{x^2}{x^3 + 5} dx$$

$$307. \int \frac{2x+1}{3x-1} dx$$

$$308. \int x(3+x^2)^4 dx$$

$$309. \int \frac{9}{x^2 \sqrt{9-x^2}} dx$$

$$310. \int \frac{\cos x}{\sqrt{\sin^3 x}} dx$$

$$311. \int \frac{x-3}{\sqrt{x+1}-2} dx$$

$$312. \int \frac{x-4}{x^2 - 4} dx$$

$$313. \int \frac{2 \sin x}{\cos x + \sin x} dx$$

$$314. \int (1-x^{-2})^2 \, dx$$

$$315. \int \frac{\sqrt{\tan x}}{\cos^2 x} \, dx$$

$$316. \int (3\sin x + \cos x)^2 \, dx$$

$$317. \int \frac{\sec^2 x}{(1+\tan x)^3} \, dx$$

$$318. \int \frac{1}{\cos^2 x \sin^2 x} \, dx$$

$$319. \int \cot 2x \, dx$$

$$320. \int 2^x \, dx$$

$$321. \int \frac{\sin x + \sin x \cos x}{1-\cos x} \, dx$$

$$322. \int \frac{1}{\cos^4 x} \, dx$$

$$323. \int \frac{\sin x \cos x}{\sqrt{1+\cos 2x}} \, dx$$

$$324. \int \frac{\ln x^2}{x} \, dx$$

$$325. \int \sin x \cos^2 \left(\frac{1}{2}x\right) \, dx$$

$$326. \int \frac{e^{3x}+1}{e^x+1} \, dx$$

$$327. \int \frac{\sqrt{x}}{x-1} \, dx$$

$$328. \int 2^x 3^x \, dx$$

$$329. \int 3^{2x+1} \, dx$$

$$330. \int \frac{2x^{\frac{3}{2}}+1}{x^2+2x} \, dx$$

$$331. \int \frac{1}{x(1+\sqrt{x})} \, dx$$

$$332. \int \frac{\sqrt{x}}{\sqrt{x}-1} \, dx$$

$$333. \int \frac{1}{x(1+x^2)} \, dx$$

$$334. \int \sin^4 x \sin 2x \, dx$$

$$335. \int (\tan x + \cot x)^2 \, dx$$

$$336. \int \frac{x^2+2x-2}{x^2-2x+2} \, dx$$

$$337. \int x \sin x \cos x \, dx$$

$$338. \int \sec x \tan^3 x \, dx$$

$$339. \int \frac{1}{\operatorname{cosec} x - \cot x} \, dx$$

$$340. \int \frac{2x^{\frac{1}{4}} + 1}{4x^{\frac{5}{4}} + 4x} \, dx$$

$$341. \int \frac{\ln(x-1)}{\sqrt{x}} \, dx$$

$$342. \int e^{x+e^x} \, dx$$

$$343. \int \frac{1}{x(1+\sqrt{x})^2} \, dx$$

$$344. \int x^2 e^{-x} \, dx$$

$$345. \int \frac{e^{\sqrt{x}}}{\sqrt{x}} \, dx$$

$$346. \int \sqrt{x} e^{\sqrt{x}} \, dx$$

$$347. \int \frac{4x^2 - x + 1}{(x-1)(2x-1)} \, dx$$

$$348. \int e^x \cos x \, dx$$

$$349. \int \frac{5^{2x}}{5^{2x} + 3} \, dx$$

$$350. \int \frac{3x^5}{x^3 - 1} \, dx$$

$$351. \int \frac{x-2}{x^2 - 4x - 2} \, dx$$

$$352. \int \frac{1}{(x-1)\sqrt{x^2-1}} \, dx$$

$$353. \int \frac{3x^3 - x^2 + 10x - 3}{x^2 + 3} \, dx$$

$$354. \int \frac{4}{(4+x^2)^{\frac{3}{2}}} \, dx$$

$$355. \int \frac{(x+1)^2}{x^2+1} \, dx$$

$$356. \int \frac{\cos x + \tan x}{1 + \tan^2 x} \, dx$$

$$357. \int \frac{\sqrt{1+\sqrt{x}}}{\sqrt{x}} \, dx$$

$$358. \int \frac{4x^3\sqrt{x^4+1}}{1+\sqrt{x^4+1}} dx$$

$$359. \int (\ln x)^2 dx$$

$$360. \int \sqrt{18\cos x \sin 2x} dx$$

$$361. \int \frac{1}{\sqrt{x^5+x^2}} dx$$

$$362. \int \sqrt{\sin^2 x + (\cos x - 1)^2} dx$$

$$363. \int x(\sin x + \cos x) dx$$

$$364. \int \left(\frac{1}{x^2} + \frac{1}{x^3} \right) e^{\frac{1}{x}} dx$$

$$365. \int \frac{\sec^4 x}{\sqrt{\tan x}} dx$$

$$366. \int \frac{\cos x}{(\cos x + \sin x)^3} dx$$

$$367. \int \frac{20x}{4-x^2} dx$$

$$368. \int \frac{\sqrt{x}}{1+\sqrt{x}} dx$$

$$369. \int x(\sec^2 x - \operatorname{cosec}^2 x) dx$$

$$370. \int \frac{4x^2+4x}{\sqrt{2x+1}} dx$$

$$371. \int x \tan^2 x dx$$

$$372. \int x \cos^2 3x dx$$

$$373. \int \cos x (6\sin x - 2\sin 3x)^{\frac{2}{3}} dx$$

$$374. \int \sqrt{x^2 - x^4} dx$$

$$375. \int \frac{x+3}{\sqrt[3]{x^2+6x}} dx$$

$$376. \int \frac{1-x}{1-\sqrt{x}} dx$$

$$377. \int \frac{1}{\operatorname{cosec} 2x - \cot 2x} dx$$

$$378. \int \sec^3 x \tan^5 x dx$$

$$379. \int \frac{\cosh x}{(\cosh x + \sinh x)^3} dx$$

$$380. \int \cos x \cos^2 3x \, dx$$

$$381. \int \frac{1}{\sqrt{x^{\frac{3}{2}} + 4x}} \, dx$$

$$382. \int \frac{2}{(\cos x + 2 \sin x)^2} \, dx$$

$$383. \int \ln\left(\frac{1}{6}x + 2\right) \, dx$$

$$384. \int \frac{3x}{1 + \sqrt{x-1}} \, dx$$

$$385. \int \frac{1}{x(x^3 - 1)} \, dx$$

$$386. \int x^5 (1 - x^3)^{\frac{1}{2}} \, dx$$

$$387. \int \frac{1}{x^{\frac{1}{2}} - x^{\frac{1}{4}}} \, dx$$

$$388. \int \frac{1}{2x^2 - 2x + 1} \, dx$$

$$389. \int \frac{1}{\sqrt{-x^2 - 2x}} \, dx$$

$$390. \int \frac{1}{\sqrt{9x^2 + 12x + 5}} \, dx$$

$$391. \int \frac{1}{\sqrt{16x^2 - 8x}} \, dx$$

$$392. \int \frac{x}{\sqrt{1-x}} \, dx$$

$$393. \int \frac{4x^2}{4x^2 + 1} \, dx$$

$$394. \int e^{\cos x} \sin x \cos x \, dx$$

$$395. \int (9 - 4\sin^2 x)^{\frac{1}{2}} \sin x \, dx$$

$$396. \int \frac{2}{x + \sqrt{1 - x^2}} \, dx$$

$$397. \int \frac{1}{\sqrt{x+1} + \sqrt{x-1}} \, dx$$

$$398. \int \cosh 2x \, dx$$

$$399. \int e^x (\tan x + \sec^2 x) \, dx$$

$$400. \int \frac{\sqrt{x+1}}{x+5} \, dx$$

$$401. \int \frac{1}{x\sqrt{x^2-1}} dx$$

$$402. \int (1-\cos x)\sqrt{(1+\cos x)^2 + \sin^2 x} dx$$

$$403. \int \frac{x+3}{x^2+1} dx$$

$$404. \int \frac{4x^3 - 3x^2 + 2x - 1}{x+1} dx$$

$$405. \int \frac{1}{x^2+x+1} dx$$

$$406. \int \frac{9}{(9-x^2)^{\frac{3}{2}}} dx$$

$$407. \int \frac{2}{x^3-x} dx$$

$$408. \int \frac{1}{\sqrt{x^2+36}} dx$$

$$409. \int \frac{x^2}{\sqrt{1-x^2}} dx$$

$$410. \int \frac{\sqrt{x}}{x+1} dx$$

$$411. \int \frac{1}{9x^2+64} dx$$

$$412. \int \frac{x}{\sqrt{x^2+1}} dx$$

$$413. \int \frac{x^2}{\sqrt{x^2+1}} dx$$

$$414. \int x^3(1-x^2)^{\frac{1}{2}} dx$$

$$415. \int \sinh x \cosh x dx$$

$$416. \int \frac{4^x + 2 \times 16^x}{1+16^x} dx + C$$

$$417. \int \frac{\sin x}{\cos x + \cos^3 x} dx$$

$$418. \int \sinh \sqrt{x} dx$$

$$419. \int \frac{\operatorname{sech} x}{\cosh x - \sinh x} dx$$

$$420. \int \frac{1+\sin x}{1-\sin x} dx$$

$$421. \int \frac{4}{(x^2-4)^{\frac{3}{2}}} dx$$

$$422. \int 4 \sinh\left(\frac{1}{4}x\right) dx$$

$$423. \int \frac{1-\cos x}{1+\cos x} dx$$

$$424. \int \frac{1}{5+4\cos x} dx$$

$$425. \int \cosh^2 2x dx$$

$$426. \int \frac{1}{\sqrt{3+2x-x^2}} dx$$

$$427. \int \frac{1}{1+\sin 2x} dx$$

$$428. \int \frac{588}{4x^2+49} dx$$

$$429. \int \frac{x+1}{x^2+9} dx$$

$$430. \int \sqrt{e^x-1} dx$$

$$431. \int \frac{\sqrt{e^x}}{\sqrt{e^x+e^{-x}}} dx$$

$$432. \int \sqrt{1-e^{2x}} dx$$

$$433. \int \frac{16}{(x^2+4)^{\frac{5}{2}}} dx$$

$$434. \int \sqrt{(1-x^2)^3} dx$$

$$435. \int \cosh x \arctan(\sinh x) dx$$

$$436. \int \sec x dx$$

$$437. \int \frac{1}{\sec x - 1} dx$$

$$438. \int \frac{\sin x}{1-\tan x} dx$$

$$439. \int \frac{\cos x}{\cos^2 x + 4 \sin x - 5} dx$$

$$440. \int \frac{2 \cos x}{\cos x + \sin x} dx$$

$$441. \int \frac{18}{(\cos^2 x + 4 \sin x - 5) \cos x} dx$$

$$442. \int \frac{\tan x}{1+\sin^2 x} dx$$

$$443. \int (x+1)e^{x+1} dx$$

$$444. \int \tan x \sec^4 x \, dx = \frac{1}{4} \sec^4 x + C$$

$$445. \int \frac{4}{(1-\sin x)\cos x} \, dx$$

$$446. \int \frac{x+2}{\sqrt{1-4x^2}} \, dx$$

$$447. \int \frac{4x+1}{\sqrt{4x^2-9}} \, dx$$

$$448. \int 8x \ln(2x+1) \, dx$$

$$449. \int \cos 3x \sin 6x \, dx$$

$$450. \int \frac{4}{3+5\cos x} \, dx$$

$$451. \int \arctan x \, dx$$

$$452. \int \frac{4 \cot x}{1+\cos^2 x} \, dx$$

$$453. \int \frac{18}{(x^2+9)^2} \, dx$$

$$454. \int e^x \cosh x \, dx$$

$$455. \int \frac{(x+1)^{\frac{3}{2}}}{x^2-x} \, dx$$

$$456. \int \frac{x^4}{(x^5-1)^{\frac{3}{2}}} \, dx$$

$$457. \int \frac{9}{e^x \sqrt{e^{2x}-9}} \, dx$$

$$458. \int \frac{1}{\sqrt{1-x-x^2}} \, dx$$

$$459. \int \frac{1-3x^3}{\sqrt{1-x^2}} \, dx$$

$$460. \int \frac{8}{(1+x^2)^3} \, dx$$

$$461. \int \frac{x^4}{\sqrt{x^{10}-1}} \, dx$$

$$462. \int \frac{4}{e^x \sqrt{e^{2x}+4}} \, dx$$

$$463. \int \frac{2}{1+\sqrt[3]{x}} \, dx$$

$$464. \int x \operatorname{arccosh} x \, dx$$

$$465. \int (x^3 + 5x^2 - 2)e^{2x} \, dx$$

$$466. \int \frac{1}{x\sqrt{x^2 - 2}} \, dx$$

$$467. \int \sqrt{\frac{1+x}{1-x}} \, dx$$

$$468. \int \sqrt[3]{3\sin 2x - 2\sin 3x \cos x} \, dx$$

$$469. \int \frac{25}{25+x^2} \, dx$$

$$470. \int \frac{4}{x^3 + 2x} \, dx$$

$$471. \int \frac{1}{x^2 - 4} \, dx$$

$$472. \int 4 \coth^2 2x \, dx$$

$$473. \int \frac{x^2}{\sqrt{x^2 - 16}} \, dx$$

$$474. \int \frac{\arctan x}{1+x^2} \, dx$$

$$475. \int \frac{1}{\sqrt{25-9x^2}} \, dx$$

$$476. \int \frac{\sqrt{x+2}}{\sqrt{x-1}} \, dx$$

$$477. \int \frac{e^x}{\sqrt{e^{2x}-9}} \, dx$$

$$478. \int x\sqrt{1-x^2} \, dx$$

$$479. \int \frac{2^x}{\sqrt{1-4^x}} \, dx$$

$$480. \int \frac{2}{\cos x \sin^3 x} \, dx$$

$$481. \int \frac{1}{1+\sin x + \cos x} \, dx$$

$$482. \int \frac{4e^{3x}}{1+e^{2x}} \, dx$$

$$483. \int \frac{e^x}{\sqrt{9-e^{2x}}} \, dx$$

$$484. \int \frac{\cos x}{\sqrt{1+\sin^2 x}} \, dx$$

$$485. \int \frac{1}{(e^x+1)(e^x-1)} dx$$

$$486. \int \frac{x^2}{(1-x^2)^{\frac{3}{2}}} dx$$

$$487. \int \frac{1}{5\cosh x + 4\sinh x} dx$$

$$488. \int \frac{x+3}{\sqrt{4-x^2}} dx$$

$$489. \int \sqrt{\frac{1-\cos x}{1-\sin x}} dx$$

$$490. \int \frac{3\sin x - \cos x + 3}{\cos x + \sin x} dx$$

$$491. \int \frac{4x-1}{\sqrt{x^2+16}} dx$$

$$492. \int \frac{1}{4x^2+4x+2} dx$$

$$493. \int \frac{1}{1+8\sin^2 x} dx$$

$$494. \int \frac{1}{\sqrt{\sin x \cos^3 x}} dx$$

$$495. \int \frac{\sin x}{16+9\cos^2 x} dx$$

$$496. \int \sinh^4 x \coth x dx$$

$$497. \int \frac{5\cos x - \sin x}{3\cos x + 2\sin x} dx$$

$$498. \int \frac{3x-4}{x^2+2x+17} dx$$

$$499. \int \frac{x+4}{\sqrt{x^2+8x+3}} dx$$

$$500. \int \operatorname{arsinh}(\sqrt{x}) dx$$

$$501. \int \frac{1}{2x^2+7x+3} dx$$

$$502. \int \frac{10\sinh 2x}{\cosh^2 2x} dx$$

$$503. \int x \arctan x dx$$

$$504. \int \frac{\sin(\ln x)}{x^2} dx$$

$$505. \int \frac{x}{(x+1)(x^2+x+1)} dx$$

$$506. \int x(2^x) dx$$

507. $\int e^{2x} \sinh x \, dx = \frac{1}{6}e^{3x} - \frac{1}{2}e^x + C$

508. $\int \frac{x^2}{(x^2+8)^{\frac{3}{2}}} \, dx$

509. $\int \ln(1+x^2) \, dx$

510. $\int \frac{\cosh 3x}{\sinh^2 3x} \, dx$

511. $\int \frac{4}{5-3\cos x} \, dx$

512. $\int \sinh^2 x \, dx$

513. $\int \operatorname{sech}^2 4x \, dx$

514. $\int \frac{1}{\sqrt{64+9x^2}} \, dx$

515. $\int \frac{8}{\sqrt{16x^2-1}} \, dx$

516. $\int \frac{1}{\sqrt{x} \cos^2 \sqrt{x}} \, dx$

517. $\int \frac{6}{(1+\cos x)^2} \, dx$

518. $\int \sin^3 x \sqrt{\left(\cos^2 x \sin x\right)^2 + \left(\sin^2 x \cos x\right)^2} \, dx$

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

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

521. $\int \frac{\sqrt{25-x^2}}{x} \, dx$

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

523. $\int e^x \sin x \, dx$

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

525. $\int x^3 e^{x^2} \sin x \, dx$

526. $\int \frac{\tan \sqrt{x}}{\sqrt{x}} \, dx$

$$527. \int \frac{x+2}{(x-2)^2 \sqrt{x}} dx$$

$$528. \int \frac{1}{\sqrt{1+e^x}} dx$$

$$529. \int \operatorname{cosec}^3 x dx$$

$$530. \int \frac{1}{e^{2x}-3e^x} dx$$

$$531. \int \frac{\cosh x}{1+\sinh x} dx$$

$$532. \int \frac{1}{6\sinh 2x + 9\cosh 2x} dx$$

$$533. \int \sqrt{1+4\sinh^2 x \cosh^2 x} dx$$

$$534. \int \frac{\operatorname{arsinh} x}{\sqrt{x^2+1}} dx$$

$$535. \int \frac{x}{\sqrt{x^2+1}} dx$$

$$536. \int \sqrt{x^2+4} dx$$

$$537. \int \frac{1}{4x^2 \left(1+x^4\right)} dx$$

$$538. \int \frac{6x^2}{\sqrt{1-4x^6}} dx$$

$$539. \int \frac{x^2}{\sqrt{1-x^2}} dx$$

$$540. \int \frac{1}{\sqrt{4-x^2}} dx$$

$$541. \int \left(1-\frac{1}{x}\right)^2 + \left(\frac{2}{\sqrt{x}}\right)^2 dx$$

$$542. \int \sqrt{x^2-4} dx$$

$$543. \int \frac{1}{x+\sqrt{x^2+1}} dx$$

$$544. \int \frac{1}{\sqrt{x^2+9}} dx$$

$$545. \int \frac{1}{\sqrt{x}\sqrt{1+\sqrt{x}}} dx$$

$$546. \int \frac{1}{x(1+x^2)^3} dx$$

$$547. \int \frac{\sin x \cos x}{\cos^2 x + 3 \cos x + 2} dx$$

$$548. \int \sin(\ln x) dx$$

$$549. \int -\sinh\left(\frac{1}{2}x\right) dx$$

$$550. \int (\cos x)[\ln(\sin x)] dx$$

$$551. \int \sqrt{1-x^2} dx$$

$$552. \int \frac{3}{x^2 - 4x + 13} dx$$

$$553. \int \frac{\sin x}{\cos^5 x} dx$$

$$554. \int 3 \tanh^2 x dx$$

$$555. \int \frac{1}{\sqrt{x^2 - 4x + 13}} dx$$

$$556. \int \frac{3}{\sqrt{4-x^4}} dx$$

$$557. \int \frac{1}{\sqrt{16x^2 - 9}} dx$$

$$558. \int \frac{4}{(4x-x^2)^{\frac{3}{2}}} dx$$

$$559. \int \cosh \sqrt{x} dx$$

$$560. \int \sinh x \operatorname{sech}^2 x dx$$

$$561. \int \frac{1}{\sqrt{2x-x^2}} dx$$

$$562. \int \frac{8}{x^4 - 1} dx$$

$$563. \int \frac{1}{x(x^2+1)} dx$$

$$564. \int \frac{1}{x\sqrt{1-(\ln x)^2}} dx$$

$$565. \int \frac{6}{(1+\cos x)^2} dx$$

$$566. \int \frac{x}{1+\sqrt{x}} dx$$

$$567. \int \frac{15}{4\cos x + 3\sin x} dx$$

$$568. \int e^x (2\cos x - 3\sin x) dx$$

$$569. \int \log_2 x dx$$

$$570. \int \sqrt{1+\cos 3x} dx$$

$$571. \int \frac{x^3}{1+x^8} dx$$

$$572. \int \ln(x + \sqrt{x}) dx$$

$$573. \int x \sin x \sin 2x dx$$

$$574. \int \frac{\cos x}{\sin x + 2\cos x} dx$$

$$575. \int \sqrt{\frac{x-2}{4-x}} dx$$

$$576. \int \frac{\sinh^3 x}{\cosh^2 x} dx$$

$$577. \int \frac{\sec^2 x}{4 + \tan^2 x} dx$$

$$578. \int \frac{4x+5}{x^2+2x+2} dx$$

$$579. \int \frac{1}{(x-2)^{\frac{1}{2}}(4-x)^{\frac{1}{2}}} dx$$

$$580. \int \frac{x^3}{x-2} dx$$

$$581. \int x^5 e^{x^3} dx$$

$$582. \int \frac{x^2-12x-6}{(x-3)(x^2+2)} dx$$

$$583. \int \sin x \sin^3 \left(\frac{1}{2}x\right) dx$$

$$584. \int \frac{\cot x}{\sqrt{1-\cos 2x}} dx$$

$$585. \int \tan^5 x \sec x dx$$

$$586. \int \frac{2\cosh x \sinh x}{1+\cosh^4 x} dx$$

$$587. \int \frac{\cos^3 x}{\sin^2 x} dx$$

$$588. \int 5\sin\left(\frac{1}{3}x\right)\sqrt{\cos\left(\frac{1}{6}x\right)} dx$$

589. $\int \arcsin \sqrt{x} \, dx$

590. $\int \sqrt{x^2 + 2x + 2} \, dx$

591. $\int \frac{\cos x}{1 + \sin^2 x} \, dx$

592. $\int \frac{x^2 - 2x - 2}{1 - x^3} \, dx$

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

594. $\int \frac{8x^2 - 29x - 10}{(x^2 - x - 2)^2} \, dx$

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

596. $\int \frac{4 \tan x}{1 + \cos^2 x} \, dx$

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

598. $\int \frac{1}{(x+1)\sqrt{x+2}} \, dx$

599. $\int \frac{1}{(x+6)(x-2)\sqrt{x+2}} \, dx$

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

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

602. $\int \frac{1}{(x+1)\sqrt{x^2 + 4x + 2}} \, dx$

603. $\int \sqrt{36 - x^2} \, dx$

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

605. $\int \frac{\sqrt{x}}{\sqrt{1-4x}} \, dx$

606. $\int \frac{2}{1 + \sin x + 2 \cos x} \, dx$

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

608. $\int \frac{\ln(2x-1)}{2x-1} \, dx$

609. $\int \cos(\ln x) \, dx$

$$610. \int \arcsin x \, dx$$

$$611. \int \frac{1}{\sqrt{x^2 - 16}} \, dx$$

$$612. \int \frac{3x^4 + x^3 + 2x^2 + x - 2}{(x+1)x^5} \, dx$$

$$613. \int \frac{e^{\arcsin x}}{\sqrt{1-x^2}} \, dx$$

$$614. \int \sqrt{\frac{3+2\sqrt{x}}{4x}} \, dx$$

$$615. \int \frac{2x+1}{\sqrt{9-x^2}} \, dx$$

$$616. \int \frac{\sinh x}{\cosh x - 1} \, dx$$

$$617. \int \frac{1}{x\sqrt{1-x^2}} \, dx$$

$$618. \int \frac{1}{\sqrt{x^2 - 2x}} \, dx$$

$$619. \int \frac{3}{(4x+5)\sqrt{1-x^2} - 3(1-x^2)} \, dx$$

$$620. \int \frac{1}{x^2\sqrt{4-x^2}} \, dx$$

$$621. \int \frac{\arcsin x}{\sqrt{1-x^2}} \, dx$$

$$622. \int \frac{3}{x\sqrt{3x^2+2x-1}} \, dx$$

$$623. \int \frac{3}{x\sqrt{x^2+2}} \, dx$$

$$624. \int \frac{1}{1+\sin^2 x} \, dx$$

$$625. \int \frac{\sin^2 x}{1+\cos^2 x} \, dx$$

$$626. \int \frac{2x}{\sqrt{x^4+1}} \, dx$$

$$627. \int \frac{1-x^2}{(1+x^2)^2} \, dx$$

$$628. \int \frac{xe^{2x^2}}{\sqrt{1+2e^{2x^2}}} \, dx$$

$$629. \int \frac{x^5+x-1}{x^3+1} \, dx$$

$$630. \int \sin^4 x \cos^4 x \, dx$$

$$631. \int \frac{2}{x\sqrt{x^4-1}} dx$$

$$632. \int \frac{2x}{\sqrt{x^4-1}} dx$$

$$633. \int \frac{\sin^6 x}{\cos^8 x} dx$$

$$634. \int \cot^2 3x \operatorname{cosec} 3x dx$$

$$635. \int \frac{6 \sinh x}{\sinh x + \cosh x} dx$$

$$636. \int (x^2 + x^{-4})^{-2} dx$$

$$637. \int \frac{12x-1}{(6x^2-x-1)(6x^2-x+5)+10} dx$$

$$638. \int \sqrt{\frac{x}{x-1}} dx$$

$$639. \int \frac{4x^3 - 12x^2 - 22x - 3}{(4-x)(x+1)} dx$$

$$640. \int x \ln(x^2 + 1) dx$$

$$641. \int \frac{x^4 + x^3 + 3x - 1}{x(x^2 + 1)^2} dx$$

$$642. \int \frac{6}{1+x^3} dx$$

$$643. \int \frac{2\cos x}{\cos x - \sin x} dx$$

$$644. \int \sec^3 x dx$$

$$645. \int \frac{1}{x+x^4} dx$$

$$646. \int \frac{1}{x^2 + 8x + 17} dx$$

$$647. \int x^2 \cos^3 x dx$$

$$648. \int \frac{1}{\sqrt{16x^2 + 1}} dx$$

$$649. \int \frac{1}{2 + \cos x} dx$$

$$650. \int \frac{\sin x}{\sin(x + \frac{1}{4}\pi)} dx$$

$$651. \int \frac{1}{\tanh x + \tan x} dx$$

$$652. \int \frac{(2x+1)^2}{x(x+1)^4} dx$$

$$653. \int \frac{1}{x^2(1+x^4)^{\frac{3}{4}}} dx$$

$$654. \int \frac{1}{x(x-\sqrt{x^2-1})} dx$$

$$655. \int \frac{\sqrt{x^2-1}}{x} dx$$

$$656. \int \frac{(2+\tan^2 x)\sec^2 x}{1+\tan^3 x} dx$$

$$657. \int \frac{1+\sqrt{x+1}}{\sqrt[3]{x+1}+\sqrt{x+1}} dx$$

$$658. \int \operatorname{sech} x dx$$

$$659. \int \frac{2x-3}{\sqrt{x^2-9}} dx$$

$$660. \int \frac{1}{1+\tan x} dx$$

$$661. \int \frac{\sqrt{x}}{1-x^3} dx$$

$$662. \int \sqrt{2^x-1} dx$$

$$663. \int \frac{4\sin 3x}{(\cos 7x+\cos x)^2+(\sin 7x+\sin x)^2} dx$$

$$664. \int \frac{4x}{4+x^4} dx$$

$$665. \int \frac{12x^2}{(x^2-1)^2} dx$$

$$666. \int \frac{2x+x^2 \cot x}{x^2 + \operatorname{cosec} x} dx$$

$$667. \int \frac{1-\tan x}{1+\tan x} dx$$

$$668. \int \frac{\sqrt{\tan x}}{\sin 2x} dx$$

$$669. \int \frac{16}{(x^2+4)^2} dx$$

$$670. \int \operatorname{arcsec} x dx$$

$$671. \int \frac{x^2}{1-2\sqrt{x}} dx$$

$$672. \int \frac{1-x}{(1+x)^2 \sqrt{x}} dx$$

$$673. \int 2e^x \sqrt{e^{2x}-1} dx$$

$$674. \int \frac{1}{\sqrt{x} + \sqrt[3]{x}} dx$$

$$675. \int \frac{1}{\sqrt{1-\sin 2x}} dx$$

$$676. \int e^x (3\sec^2 x + 2\sec^2 x \tan x + 2\tan x) dx$$

$$677. \int \sqrt[3]{\tan x} dx$$

$$678. \int \frac{x(2-3x)}{x^2+e^{3x}} dx$$

$$679. \int \frac{(x+6)}{(x+2)^2} dx$$

$$680. \int \frac{9}{(4x^2-24x+27)^{\frac{3}{2}}} dx$$

$$681. \int \frac{\sqrt{x-x^2}}{x^4} dx$$

$$682. \int \frac{16}{(x^2-2x+5)^2} dx$$

$$683. \int \frac{\tanh x}{\operatorname{sech}^2 x - \tanh^2 x} dx$$

$$684. \int \frac{1}{x\sqrt{x^2+x+4}} dx$$

$$685. \int \frac{x}{(5-4x-x^2)^{\frac{3}{2}}} dx$$

$$686. \int (1-x^2)^{\frac{5}{2}} dx$$

$$687. \int \frac{x}{x^4+x^2+1} dx$$

$$688. \int \frac{8}{(x^2+1)^3} dx$$

$$689. \int \frac{1+\cos x}{\sin^2 x} dx$$

$$690. \int \frac{x^4-1}{x^2\sqrt{x^4+1}} dx$$

$$691. \int \frac{x+9}{(x^2+2x+2)^3} dx$$

$$692. \int \frac{\sec^2 x - 1}{\sec^3 x + \tan^3 x} dx$$

$$693. \int \tan x \sec 2x dx$$

$$694. \int \frac{5 \cos x}{(2+\sin x)(3+4\sin x)} dx$$

$$695. \int \frac{x^2+3x+3}{(x+1)^3} (e^{-x} \sin x) dx$$

$$696. \int \frac{\sin^6 x + \cos^6 x}{\sin^2 x \cos^2 x} dx$$

$$697. \int \frac{3 \sin^2 x \cos^2 x}{(\cos^3 x - \sin^3 x)^2} dx$$

$$698. \int \frac{\sin^8 x - \cos^8 x}{1 - \frac{1}{2} \sin^2 2x} dx$$

$$699. \int 12x^2 \arctan x dx$$

$$700. \int \sqrt{\tan x} dx$$

$$701. \int \frac{\cot^3 x}{1+2\cot^2 x+2\cot^4 x} dx$$

$$702. \int (2x^2+1)e^{x^2} dx$$

$$703. \int \left(1+x-\frac{1}{x}\right) e^{x+\frac{1}{x}} dx$$

$$704. \int \frac{1}{\cos^6 x + \sin^6 x} dx$$

$$705. \int \sqrt{e^x - 1} dx$$

$$706. \int \frac{1}{\sqrt{e^x - 1}} dx$$

$$707. \int \frac{1}{x^4 + 3x^2 + 2} dx$$

$$708. \int x \arccos \left[\frac{1-x^2}{1+x^2} \right] dx$$

$$709. \int 2x^2 \sec^2 x \tan x dx$$

$$710. \int \ln(\sqrt{x} + \sqrt{x+1}) dx$$

$$711. \int \frac{3\sin x + 4\cos x}{2\sin x - \cos x} dx$$

$$712. \int \frac{4}{x\sqrt{x^4+1}} dx$$

$$713. \int \frac{(3x^2+5x)\sqrt{x}}{(x+1)^2} dx$$

$$714. \int \frac{4}{(x^2-4)^{\frac{3}{2}}} dx$$

$$715. \int \frac{1}{(1-x)\sqrt{1-2x}} dx$$

$$716. \int \sqrt{\tan x} - \sqrt{\cot x} dx$$

$$717. \int \sqrt{(1+x)(5-x)} dx$$

$$718. \int \sqrt[3]{\frac{8}{x} + \frac{8}{x^3}} dx$$

$$719. \int \frac{1-x}{\sqrt{x}(x+1)^2} dx$$

$$720. \int 24 \sin x \sin 2x \sin 3x dx$$

$$721. \int \frac{\sec^2 x}{\sqrt{\sec x + \tan x}} dx$$

$$722. \int \ln(\ln x) + \frac{1}{(\ln x)^2} dx$$

$$723. \int \sqrt{(2x+5)(2x-3)} dx$$

$$724. \int \frac{3x}{x-\sqrt{x^2-1}} dx$$

$$725. \int \frac{(x^2+1)e^x}{(x+1)^2} dx$$

$$726. \int \frac{(x+3)\sqrt{x}}{(x+1)^2} dx$$

$$727. \int \frac{x^2+2}{(2\cos x + x\sin x)^2} dx$$

$$728. \int \frac{[\ln(x^2+1) - 2\ln x]\sqrt{x^2+1}}{x^4} dx$$

$$729. \int \frac{\arcsin \sqrt{x} - \arccos \sqrt{x}}{\arcsin \sqrt{x} + \arccos \sqrt{x}} dx$$

$$730. \int \frac{e^{3x}(6x-5)}{(2x-1)^2} dx$$

$$731. \int \frac{1-2x}{x^{\frac{2}{3}}(x+1)^4} dx$$

$$732. \int \frac{1}{x^4+1} dx$$

$$733. \int \frac{x^2}{(x\cos x - \sin x)^2} dx$$

$$734. \int \frac{1}{x^6+1} dx$$

$$735. \int \frac{x^2+1}{x^4-x^2+1} dx$$

$$736. \int \frac{x^2 \arctan x}{1+x^2} dx$$

$$737. \int \frac{x}{1+x^4} dx$$

$$738. \int \frac{1}{1-\cot x} dx$$

$$739. \int \frac{\sin(x^{-2})}{x^5} dx$$

$$740. \int 3^{\ln x} dx$$

$$741. \int \tan^5 x dx$$

$$742. \int \tan^3 x \sec^3 x dx$$

$$743. \int \sec x \operatorname{cosec}^3 x dx$$

$$744. \int \frac{\cos x}{\cos 2x} dx$$

$$745. \int \sec^6 x dx$$

$$746. \int \frac{\ln x}{\sqrt[3]{x}} dx$$

$$747. \int 4x\sqrt{x^4+1} dx$$

$$748. \int \frac{1}{x[1+3\sin^2(\ln x)]} dx$$

$$749. \int \ln[2x+\sqrt{4x^2-1}] dx$$

$$750. \int \ln(x^2-1) dx$$

$$751. \int \frac{e^x \sqrt{e^x-1}}{e^x-2} dx$$

$$752. \int \frac{1}{x^2\sqrt{x^2+1}} dx$$

$$753. \int \frac{\sqrt{x^2+4}}{x^2} dx$$

$$754. \int \frac{1+\cos x}{1-\cos x} dx$$

$$755. \int \tan x \ln(\sec x) dx$$

$$756. \int \frac{\arctan x}{x^2} dx$$

$$757. \int \frac{\sin x \cos x + x \ln x}{x \cos^2 x} dx$$

$$758. \int \frac{x^2(x^4+1)}{\sqrt[4]{x^4+2}} dx$$

$$759. \int \sqrt{1+\tan x} dx$$

$$760. \int \sqrt{x+\sqrt{x^2+1}} dx$$

$$761. \int \cos(4\arcsin x) dx$$

$$762. \int \cos x \operatorname{artanh}(\cos x) dx$$

$$763. \int \frac{\cos x \sin x}{\cos^2 x + \sin^2 x} dx$$

$$764. \int \frac{1}{x^7-x} dx$$

$$765. \int \frac{1}{\sqrt{x^8-x^3}} dx$$

$$766. \int \frac{\sqrt{1-x}}{1-\sqrt{x}} dx$$

$$767. \int \frac{\operatorname{sech}^4 x \tanh x}{1-\operatorname{sech}^4 x} dx$$

$$768. \int \frac{1-\sqrt{\arcsin x}}{\sqrt{1-x^2} \arcsin x} dx$$

$$769. \int \frac{2e^{2x}+e^x}{e^{4x}+2e^{3x}+e^{2x}+1} dx$$

$$770. \int \frac{1}{(2+x)\sqrt{1-x^2}} dx$$

$$771. \int \frac{4^x+1}{2^x+1} dx$$

$$772. \int \sin 2x \sin(\sin x) dx$$

$$773. \int \frac{x^2+1}{(x^2-1)\sqrt{x^4+1}} dx$$

