**Chapter 3**

**Techniques of Integration**

**3.5 Other Strategies for Integration**

**Section Exercises**

**Use a table of integrals to evaluate the following integrals.**

245. 

Answer: 

247. 

Answer: 

249. 

Answer: 

251. 

Answer: 

253. 

Answer: 

255. 

Answer: 

257. 

Answer: 

259. 

Answer: 

**Use a CAS to evaluate the following integrals. Tables can also be used to verify the answers.**

261. **[T]** 

Answer: 

263. **[T]** 

Answer: 

265. **[T]** 

Answer: 

267. **[T]** 

Answer: 

269. **[T]** 

Answer: 

271. **[T]** 

Answer: 

**Use a calculator or CAS to evaluate the following integrals.**

273. **[T]** 

Answer: 

275. **[T]** 

Answer: 8.0

277. **[T]** 

Answer: 

**Use tables to evaluate the integrals. You may need to complete the square or change variables to put the integral into a form given in the table.**

279. 

Answer: 

281. 

Answer: 

283. 

Answer: 

**Use tables to perform the integration**.

285. 

Answer: 

287. 

Answer: 

289. Find the area bounded by  Use a table of integrals or a CAS.

Answer: 

291. Use substitution and a table of integrals to find the area of the surface generated by revolving the curve  about the *x*-axis. (Round the answer to two decimal places.)

Answer: 1276.14

293. **[T]** Use a CAS or tables to find the area of the surface generated by revolving the curve  about the *x*-axis. (Round the answer to two decimal places.)

Answer: 7.21

295. Find the length of the curve  over 

Answer: 

297. Find the average value of the function  over the interval 

Answer: 

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