Answers to even problems Chapter 15 Review

2. 44.2

10. \[ \int_{0}^{4} \int_{y-4}^{4} f(x, y) \, dx \, dy \]

12. Solid in the first octant on or between the two spheres \( \rho = 1 \) and \( \rho = 2 \).

The value of the integral is \( \frac{7\pi}{6} \)

14. \( \frac{1}{4} (e - 1) \)

18. \( \frac{\pi}{4} - \frac{1}{2} \ln 2 \)

26. \( \frac{13}{24} \)

28. \( \frac{\pi}{14} \)

32. \( 12 \pi \)

34. \( \frac{\pi}{6} \)

42. \( \frac{64}{9} \pi \)