1. $-\frac{1}{4}\cos^4 x + C$

2. $\frac{1}{3}\sin^3 x - \frac{1}{5}\sin^5 x + C$

3. $\frac{1}{8}x - \frac{1}{32}\sin 4x + C$

4. $\frac{1}{2}\tan(2x - 1) + C$

5. $\ln|\cos(e^{-x})| + C$

6. $\frac{1}{3}\tan^3 x + C$

7. $\frac{1}{16}\sec^4(4x) + C$

8. $\frac{1}{7}\sec^7 x - \frac{1}{5}\sec^5 x + C$

9. $\frac{2}{3}\tan^{3/2} x + \frac{2}{7}\tan^{7/2} x + C$

10. $2\sin^{-1}(x/2) + \frac{1}{2}x\sqrt{4 - x^2} + C$

11. $8\sin^{-1}(x/4) - \frac{x\sqrt{16 - x^2}}{2} + C$

12. $\frac{1}{16}\tan^{-1}(x/2) + \frac{x}{8(4 + x^2)} + C$

13. (a) $(85\sqrt{85} - 8)/243$, (b) $(80\sqrt{10} - 13\sqrt{13})/27$, (c) $17/6$

14. (a) $35\pi\sqrt{2}$, (b) 8π