Review Mixed Practice Key

1. $-(9-x^2)^{\frac{1}{2}}+c$
2. $\frac{x^3}{3}-5\frac{x^2}{2}+19x-115\ln|x+5|+c$
3. $-\frac{1}{5}\ln|\cos 5\theta|+c$
4. $\frac{\sqrt{3}}{3}\tan^{-1}(\frac{x-3}{\sqrt{3}})+c$
5. $\ln|\cot t|+c$
6. $\frac{1}{2}\sin^{-1}(t^2)+c$
7. $\ln|\sec t+\tan t|-\ln|\cos t|+c$
8. $-\ln|1+e^{-x}|+c$
9. $\ln|e^x+e^{-x}|+c$
10. x^2-x+c
11. $\frac{-7^{(3-x)^2}}{2\ln 7}\ or*\frac{-7^{(3-x)^2}}{\ln 49}$
12. $-\frac{1}{2}\ln|\csc 2x+\cot 2x|+c$
13. $\ln|\sec x-1|+c$
14. $4\sec^{-1}(3x)+c$
15. $r=\ln|\tan t+1|+4$
16. $\frac{7}{3}$
17. $1-2\ln 2$
18. $\ln|2-\sin 2|-\ln|1-\sin 1|\ or\ \ln\left|\frac{2-\sin 2}{1-\sin 1}\right|$
19. $-\frac{1}{2}(\frac{1}{e}-1)$
20. $\frac{7}{\ln 4}$
21. $\frac{\pi}{6}$