SORIU	CEVAP
1) $\int \frac{\cos^3 x}{1-\sin x}\,dx$	$\frac{\sin^2(x)}{2}+\sin(x)+C$
2) $\int \frac{\sin x}{1+\cos^2 x}\,dx$	$-\arctan(\cos(x))+C$
3) $\int \arctan x\,dx$	$x\arctan(x)-\frac{\ln(x^2+1)}{2}+C$
4) $\int (\ln x)^2\,dx$	$x(\ln^2(x)-2\ln(x)+2)+C$
5) $\int (\cos(\ln x))\,dx$	$\frac{x(\sin(\ln(x))+\cos(\ln(x)))}{2}+C$
6) $\int \frac{\sin^2 x}{1+\sin^2 x}\,dx$	$*-\frac{\arctan(\sqrt{2}\tan(x))}{\sqrt{2}}+C$
7) $\int \frac{\sin^3 x}{\cos^6 x}\,dx$	$\frac{\sec^5(x)}{5}-\frac{\sec^3(x)}{3}+C$ $\frac{5\sec^2(x)-3}{15\cos^5(x)}+C$

SORU	CEVAP
8) $\int \frac{\sqrt[3]{x-1}+3}{\sqrt[4]{x-1}}\,dx$	$4(x-1)^{\frac{3}{4}}+\frac{12}{13}(x-1)^{\frac{13}{12}}+C$
9) $\int \frac{dx}{\sqrt{x^2-1}}$	$\ln\left(\lvert\sqrt{x^2-1}+x\rvert\right)+C$
10) $\int \frac{2+x\sqrt{1+x^2}\,dx}{\sqrt{x^2+1}}$	$2\ln\left(\lvert\sqrt{x^2+1}+x\rvert\right)+\frac{x^2}{2}+C$ V $2\operatorname{arcsinh}(x)+\frac{x^2}{2}+C$
11) $\int \frac{dx}{\sqrt{4x-x^2}}$	$\arcsin\left(\frac{x-2}{2}\right)+C$ V $-\arcsin\left(\frac{4-2x}{4}\right)+C$

SORU	CEVAP
12) $\int \frac{4x+5}{\sqrt{2x-x^2}}\,dx$	$9\arcsin(x-1)-4\sqrt{-(x-2)x}+c$ V $-4\sqrt{2x-x^2}-9\arcsin\left(\frac{2-2x}{2}\right)+c$
13) $\int \frac{\sqrt{1+\sqrt{x}}}{\sqrt{x}}\,dx$	$\frac{4(\sqrt{x}+1)^{3/2}}{3}+C$
14) $\int \frac{dx}{(x+1)(1+x^2)}$	$\frac{\ln(\lvert x+1\rvert)}{2}-\frac{\ln(x^2+1)}{4}+\frac{\arctan x}{2}+c$
15) $\int \frac{dx}{\cos^2 x}$	$\tan(x)+C$
16) $\int \frac{x}{\sqrt{3-x^2}}\,dx$	$-\sqrt{3-x^2}+C$

SORU	CEVAP
17) $\int \frac{x}{x^2+4x-5}\,dx$	$\frac{5\ln(\lvert x+5\rvert)}{6}+\frac{\ln(\lvert x-1\rvert)}{6}+c$
18) $\int \cos(\ln x)\,dx$	$\frac{x(\sin(\ln(x))+\cos(\ln(x)))}{2}+c$
19) $\int \cos\sqrt{x}\,dx$	$2(\sin(\sqrt{x})\sqrt{x}+\cos(\sqrt{x}))+C$
20) $\int \frac{d\theta}{2+\sin\theta}$ $x=\frac{\tan\theta}{2}$	
21) $\frac{dx}{5+3\cos x}$	$\frac{\arctan\left(\frac{\tan(\frac{x}{2})}{2}\right)}{2}+C$ $\downarrow$ $\frac{\arctan\left(\frac{\sin(x)}{2(\cos(x)+1)}\right)}{2}+C$

21-) $\int \frac{dx}{5+3\cos x} = \frac{\arctan\left(\frac{\sin x}{2(\cos(x)+1)}\right)}{2} + C$

22-) $\int \ln x\,dx = x\ln(x) - x + C$

23-) $\int \sin^4 x \cos^3 x\,dx = \frac{-\sin^5(x)(5\sin^2 x - 7)}{35} + C$

24-) $\int \sin^5 x \cos^2 x\,dx = -\frac{15\cos^7(x) - 42\cos^5(x) + 35\cos^3(x)}{105} + C$

25-) $\int \sin^5 x\,dx = -\frac{\cos^5(x)}{5} + \frac{2\cos^3(x)}{3} - \cos(x) + C$

26-) $\int \sqrt{3-x^2}\,dx = \frac{3\arcsin\left(\frac{x}{\sqrt{3}}\right) + x\sqrt{3-x^2}}{2} + C$

27-) $\int \frac{dx}{1+x^2} = \arctan x + C$

28-) $\int x e^{x^2} dx = \frac{e^{x^2}}{2} + C$

29-) $\int \frac{\cos x\,dx}{\sin^4 x} = -\frac{1}{3\sin^3(x)} + C$

30-) $\int \frac{dx}{x(1+\ln x)} = \ln(|\ln(x)+e|) + C$

31-) $\int \frac{dx}{1+\cos x} = \frac{\sin(x)}{\cos(x)+1} + C$

32-) $\int \frac{e^\theta d\theta}{e^{2\theta}+3e^\theta+2} = \ln(e^\theta+1) - \ln(e^\theta+2) + C$

33-) $\int \frac{x^4+3x^2+5}{x^2}\,dx = \frac{x^3+9x}{3} - \frac{5}{x} + C$

34-) $\int \frac{1+\sin x}{\sin x(1+\cos x)}\,dx =$

35-) $\int \frac{dx}{\sqrt{x^2-2}}\,dx = d\sqrt{x^2-2} + C$

36-) $\int \frac{dx}{\sin x \cos^4 x}\,dx = -\frac{\ln(\cos(x)+1)}{4} + \frac{\ln(1-\cos(x))}{4} + \frac{1}{2\cos(x)+2} + C$

37-) $\int \arcsin x\,dx = x\arcsin(x) + \sqrt{1-x^2} + C$

38-) $\int x^2 \ln x\,dx = \frac{x^3(3\ln(x)-1)}{9} + C$

39-) $\int \arccos x\,dx = x\cdot\arccos(x) - \sqrt{1-x^2} + C$

40-) $\int \frac{x^2+x+1}{(x^2+1)x}\,dx = \ln|x| + \arctan(x) + C$

34-) $2\left(\frac{\ln\left(\left|\frac{\sin(x)}{\cos(x)+1}\right|\right)}{4} + \frac{\sin^2(x)}{8(\cos(x)+1)^2}\right) + \frac{\sin(x)}{\cos x+1} + C$