1. $\dfrac{ax+b}{cx+d}$

2. $x+\sqrt{x^2+A}$

3. $\sqrt[3]{\dfrac{x-1}{x+1}}$

4. $\sqrt{x+\sqrt{x^2+A}}$

5. $\sqrt{\sqrt{x^2+1}+\sqrt{x^2-1}}$

6. $\log\log x$

7. $\log|x+\sqrt[3]{x^2+1}|$

8. $2^{\sqrt{x}}$

9. $x(x+1)^{1/3}(x^2-1)^{-1/2}$

10. $x^{\frac{1}{x}}$

11. x^{x^x}

12. $\dfrac{\sin x-\cos x}{\sin x+\cos x}$

13. $\log\left|\tan(\dfrac{\pi}{4}+\dfrac{x}{2})\right|$

14. $(1+\tan x\tan\frac{x}{2})\cos x$

15. $\tan^{-1}\dfrac{1}{x}$

16. $\sin^{-1}(\cos x)$

17. $\sin^{-1}(2x\sqrt{1-x^2})$

18. $\tan^{-1}\sqrt{\dfrac{1-\cos x}{1+\cos x}}$

19. $x^{\sqrt{x}}$

20. $\log\left|\dfrac{1-\sin 2x}{x^x(1+\sin 2x)}\right|$

21. $x^{\sin x^2}$

22. $e^{\cos(1-3x)}\sin 2x$

23. $\cos^{-1}\left(\dfrac{e^x-e^{-x}}{e^x+e^{-x}}\right)$

24. $3^{\tan nx}$

n

1. $(\sin x)^{(n)}=\sin(x+\dfrac{n\pi}{2})$

2. $(\cos x)^{(n)}=\cos(x+\dfrac{n\pi}{2})$

3. $(\log(1+x))^{(n)}=(-1)^{n-1}(n-1)!(1+x)^{-n}$

4. $(\dfrac{1-x}{1+x})^{(n)}=(-1)^n\dfrac{2n!}{(1+x)^{n+1}}$

5. $(e^x\sin x)^{(n)}=(\sqrt{2})^n e^x\sin(x+\dfrac{n\pi}{4})$

6. $(x^2 e^x)^{(n)}=(x^2+2nx+n^2-n)e^x$