The only way to learn mathematics is to do mathematics

1. $\int \frac{1}{4+9x^2}dx$

2. $\int \frac{1}{9x^2-4}dx$

3. $\int \frac{1}{a^2-b^2x^2}dx$

4. $\int \frac{x^4}{x^2+1}dx$

5. $\int \frac{x^2-1}{x^2+4}dx$

6. $\int \frac{1}{\sqrt{a^2-b^2x^2}}dx$

7. $\int \frac{1}{\sqrt{1+4x^2}}dx$

8. $\int \frac{1}{\sqrt{4x^2-9}}dx$

9. $\int \frac{1}{\sqrt{(2-x)^2+1}}dx$

ANSWERS-DPP-26

1. $\frac{1}{6}\tan^{-1}\left(\frac{3x}{2}\right)+C$

2. $\frac{1}{12}\log\left|\frac{3x-2}{3x+2}\right|+C$

3. $\frac{1}{2ab}\log\left|\frac{a+bx}{a-bx}\right|+C$

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

5. $x-\frac{5}{2}\tan^{-1}\left(\frac{x}{2}\right)+C$

6. $\frac{1}{b}\sin^{-1}\left(\frac{bx}{a}\right)+C$

7. $\frac{1}{2}\log|2x+\sqrt{4x^2+1}|+C$

8. $\frac{1}{2}\log\left|x+\sqrt{x^2-\frac{9}{4}}\right|+C$

9. $-\log|(2-x)+\sqrt{(2-x)^2+1}|+C$