គម្រោងលំហាត់

អាំងតេក្រាល

$$\int_{-\sqrt{3}}^{\sqrt{3}} \frac{x^4+x^3+2x^2+xtan^3x+tan^{-1}(x)+1}{x^6+3x^4+3x^2+1}dx$$

១១១១ លំហាត់សម្រាប់អនុវត្តន៍

៧០០ អាំងតេក្រាលមិនកំណត់

៤១១ អាំងតេក្រាលកំណត់

រៀបរៀងដោយៈ ផូ ភត្ត្រា

អាំងតេក្រាល

1 អាំងតេក្រាលមិនកំណត់

១. $\int \frac{ln(sinx)}{tanx}dx$

២. $\int \frac{sinx+cosx}{\sqrt{sin2x}}dx$

៣. $\int \frac{xtanx}{secxcosecx}dx$

៤. $\int \frac{e^x}{\sqrt{5-4e^x-e^{2x}}}dx$

៥. $\int \frac{(x-4)e^x}{(x-2)^3}dx$

៦. $\int \left(cosec^2x-cotx\right)e^x dx$

៧. $\int \frac{2x+5}{\sqrt{7-6x-x^2}}dx$

៨. $\int \frac{tanx+tan^3x}{1+tan^3}dx$

៩. $\int \frac{x+2}{\sqrt{(x-2)(x-3)}}dx$

១០. $\int \frac{5x+3}{\sqrt{x^2+4x+10}}dx$

១១. $\int e^{2x}\left(\frac{1+sin2x}{1+cos2x}\right)dx$

១២. $\int \frac{1}{sinx-sin2x}dx$

១៣. $\int e^x\left(\frac{sin4x-4}{1-cos4x}\right)dx$

១៤. $\int \frac{1-x^2}{x(1-2x)}dx$

១៥. $\int \frac{x^3-1}{x^2}dx$

១៦. $\int \left[ln\left(lnx\right)+\frac{1}{(lnx)^2}\right]dx$

១៧. $\int \left(\sqrt{tanx}+\sqrt{cotx}\right)dx$

១៨. $\int x^2tan^{-1}xdx$

១៩. $\int \frac{x^2+4}{x^4+16}dx$

២០. $\int \frac{sin2x}{(1+sinx)(2+sinx)}dx$

២១. $\int \frac{2x}{(x^2+1)(x^2+3)}dx$

២២. $\int \frac{sinx-cosx}{\sqrt{sin2x}}dx$

២៣. $\int \frac{x^2+1}{x^4+1}dx$

២៤. $\int sinxsin2xsin3xdx$

๒๕. $\int \frac{x^2}{(xsinx+cosx)^2}dx$

๒๖. $\int \frac{(3sinx-2)cosx}{5-cos^2x-4sinx}dx$

๒๗. $\int e^{2x}\left(\frac{1-sin2x}{1-cos2x}\right)dx$

๒๘. $\int \frac{1}{cos^4x+sin^4x}dx$

๒๙. $\int (x-3)\sqrt{x^2+3x-18}dx$

๓๐. $\int \frac{sin^6x+cos^6x}{sin^2x+cos^2x}dx$

๓๑. $\int \frac{x+2}{\sqrt{x^2+5x+6}}dx$

๓๒. $\int \frac{sin(x-a)}{sinx+a}dx$

๓๓. $\int \frac{\sqrt{1-sinx}}{1+cosx}\cdot e^{\frac{-x}{2}}dx$

๓๔. $\int \frac{dx}{x\,(x^5+3)}$

๓๕. $\int \frac{x^3-x^2+x-1}{x-1}dx$

๓๖. $\int \frac{6x+7}{\sqrt{(x-5)(x-4)}}dx$

๓๗. $\int \frac{sec^2\sqrt{x}}{\sqrt{x}}dx$

๓๘. $\int cos^{-1}(sinx)dx$

๓๙. $\int \frac{x}{(x^2+1)(x-1)}dx$

๔๐. $\int \frac{3x+5}{x^3-x^2-x+1}dx$

๔๑. $\int \frac{3x+1}{(x+1)^2(x+3)}dx$

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

๔๓. $\int \frac{5x-2}{1+2x+3x^2}dx$

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

๔๕. $\int \frac{1}{x(x^3+8)}dx$

๔๖. $\int \frac{x+2}{\sqrt{x^2+2x+3}}dx$

๔๗. $\int \frac{cos2x-cos2\alpha}{cosx-cos2\alpha}dx$

๔๘. $\int \frac{sec^2x}{cosec^2x}dx$

๔๙. $\int \frac{2}{(1-x)(1+x^2)}dx$

๕๐. $\int (1-x)\sqrt{x}dx$

๕๑. $\int \frac{x+cos6x}{3x^2+sin6x}dx$

๕๒. $\int \frac{xsin^{-1}x}{\sqrt{1-x^2}}dx$

๕๓. $\int \frac{1}{x^2+16}dx$

๕๔. $\int \frac{2cosx}{3sin^2x}dx$

๕๕. $\int \frac{e^{tan^{-1}x}}{1+x^2}dx$

๕๖. $\int \frac{1}{\sqrt{1-x^2}}dx$

๕๗. $\int (ax+b)^3 dx$

๕๘. $\int \frac{lnx}{x} dx$

๕๙. $\int 2^x dx$

๖๐. $\int sec^2(7-x) dx$

๖๑. $\int \frac{x^2+x+1}{(x+2)(x^2+1)} dx$

๖๒. $\int \frac{(1+lnx)^2}{x} dx$

๖๓. $\int (x+3)\sqrt{3-4x-x^2} dx$

๖๔. $\int \frac{x^3-1}{x^3+x} dx$

๖๕. $\int \frac{dx}{sinx+sin2x}$

๖๖. $\int \frac{x^2-3x+1}{\sqrt{1-x^2}} dx$

๖๗. $\int cec^2(7-4x) dx$

๖๘. $\int xcos^{-1}x dx$

๖๙. $\int \frac{1}{x\left[6(lnx)^2+7lnx+2\right]} dx$

๗๐. $\int \frac{sin2x}{a^2cosx+b^2sinx} dx$

๗๑. $\int \frac{\sqrt{x}}{\sqrt{a^3-x^3}} dx$

๗๒. $\int \frac{cos\theta}{(4+sin^2\theta)(5-4cos^2\theta)} dx$

๗๓. $\int \frac{1}{5-8x-x^2} dx$

๗๔. $\int log_x x dx$

๗๕. $\int \left(3^{log_x 2} - 2^{log_x 3}\right) dx$

๗๖. $\int \left(x^m + m^x + m^m + \frac{m}{x}\right) dx$

๗๗. $\int 2^x \cdot 3^x dx$

๗๘. $\int tan^2 x dx$

๗๙. $\int cot^2 x dx$

๘๐. $\int \frac{1}{sin^2 x cos^2 x} dx$

๘๑. $\int \frac{(3sin\theta-2)cos\theta}{5-cos^2\theta-4sin\theta} d\theta$

๘๒. $\int \frac{(2x-5)e^{2x}}{(2x-3)^3} dx$

๘๓. $\int \frac{sin^2 x - cos^2 x}{sinxcosx} dx$

๘๔. $\int (tanx+cotx)^2 dx$

๘๕. $\int \frac{1}{1+cos^2 x} dx$

๘๖. $\int \left(\frac{8^{1+x}+4^{1+x}}{2^{2x}}\right) dx$

๘๗. $\int \left(\frac{x}{m} + \frac{m}{x} + x^m\right) dx$

๘๘. $\int \frac{(a^x+b^x)^2}{a^x b^x} dx$

๘๙. $\int \frac{(2^x+3^x)}{2^x\cdot 3^x}dx$

๙๐. $\int \frac{1}{1-sinx}dx$

๙๑. $\int \frac{sin^4x+cos^4x}{sin^2xcos^2x}dx$

๙๒. $\int \frac{sin^6x+cos^6x}{sin^2xcos^2x}dx$

๙๓. $\int \frac{cos2x-cos\alpha}{cosx-cos\alpha}dx$

๙๔. $\int \frac{cos^4x-sin^4x}{\sqrt{1+cos4x}}dx$

๙๕. $\int \frac{1+tan^2x}{1+cot^2x}dx$

๙๖. $\int \frac{cosx-cos2x}{1-cosx}dx$

๙๗. $\int \frac{\sqrt{x^4+x^{-4}+2}}{x^3}dx$

๙๘. $\int \frac{5cos^3x+3sin^3x}{cos^2xsin^2x}dx$

๙๙. $\int \left(\frac{cosx-sinx}{cosx+sinx}\right)(1+sin2x)dx$

๑๐๐. $\int \frac{cos5x+cos4x}{1+2cos3x}dx$

๑๐๑. $\int \frac{cosx-cos2x}{1-cosx}dx$

๑๐๒. $\int \frac{1}{tanx+cotx+secx+cosx}dx$

๑๐๓. $\int \frac{x}{x+1}dx$

๑๐๔. $\int \frac{(1+x)^2}{x(1+x^2)}dx$

๑๐๕. $\int \frac{x^2-2}{x^2+1}dx$

๑๐๖. $\int \frac{x-1}{x^{\frac{2}{3}}+x^{\frac{1}{3}}+1}dx$

๑๐๗. $\int \frac{x^4-3}{x^2+1}dx$

๑๐๘. $\int \frac{x^4+2}{x^2+2}dx$

๑๐๙. $\int \frac{x^6-1}{x^2+1}dx$

๑๑๐. $\int \frac{x^8+x^4+1}{x^4+x^2+1}dx$

๑๑๑. $\int \frac{x^4}{x^2+1}dx$

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

๑๑๓. $\int \frac{x^6+1}{x^2+1}dx$

๑๑๔. $\int sin^{-1}(sinx)dx$

๑๑๕. $\int sin^{-1}(cosx)dx$

๑๑๖. $\int tan^{-1}\left(\sqrt{\frac{1-cos2x}{1+cos2x}}\right)dx$

๑๑๗. $\int tan^{-1}\left(\frac{sin2x}{1+cos2x}\right)dx$

๑๑๘. $\int tan^{-1}\left(\frac{sinx}{1-cosx}\right)dx$

๑๑๙. $\int tan^{-1}\left(\sqrt{\frac{1-sinx}{1+sinx}}\right)dx$

១២០. $\int tan^{-1}\left(\frac{sinx}{1+cosx}\right)dx$

១២១. $\int tan^{-1}\left(\frac{cosx}{1-sinx}\right)dx$

១២២. $\int tan^{-1}\left(\frac{1-sinx}{cosx}\right)dx$

១២៣. $\int tan^{-1}(secx+tanx)dx$

១២៤. $\int(3x+2)dx$

១២៥. $\int\frac{1}{2x-3}dx$

១២៦. $\int\frac{1}{5-2x}dx$

១២៧. $\int e^{ax+b}dx$

១២៨. $\int 3^{4x+5}dx$

១២៩. $\int cos(5x+3)dx$

១៣០. $\int sin2xdx$

១៣១. $\int\sqrt{3x+2}dx$

១៣២. $\int\frac{1}{\sqrt{3x+4}}dx$

១៣៣. $\int\frac{1}{\sqrt{x+2}-\sqrt{x+1}}dx$

១៣៤. $\int\frac{1}{\sqrt{2x+5}-\sqrt{2x+3}}dx$

១៣៥. $\int\frac{1}{\sqrt{3x+4}-\sqrt{3x+1}}dx$

១៣៦. $\int\frac{1}{\sqrt{x+1}+\sqrt{x}}dx$

១៣៧. $\int\frac{1}{\sqrt{x+a}+\sqrt{x+b}}dx$

១៣៨. $\int\frac{dx}{\sqrt{2x+2018}+\sqrt{2x+2020}}$

១៣៩. $\int\frac{x}{\sqrt{x-1}}dx$

១៤០. $\int\frac{\sqrt{x}}{x+1}dx$

១៤១. $\int\frac{x}{\sqrt{3x+1}}dx$

១៤២. $\int\frac{x+1}{\sqrt{2x-1}}dx$

១៤៣. $\int\frac{x-1}{\sqrt{x+4}}dx$

១៤៤. $\int\frac{x}{x^2+1}dx$

១៤៥. $\int\frac{cosx-sinx}{sinx+cosx}dx$

១៤៦. $\int\frac{3cosx}{2sinx+5}dx$

១៤៧. $\int\frac{cosx-sinx}{2+sin2x}dx$

១៤៨. $\int\frac{xe^x+e^x}{cos^2(xe^x)}dx$

១៤៩. $\int\frac{1}{x(1+lnx)^2}dx$

១៥០. $\int\frac{cosx-sinx+1-x}{e^x+sinx+x}dx$

១៥១. $\int\frac{1}{1+e^x}dx$

១៥២. $\int \frac{1}{x(x^3+1)}dx$

១៥៣. $\int \frac{1}{x(x^4+1)}dx$

១៥៤. $\int \frac{1}{x(x^5-1)}dx$

១៥៥. $\int \frac{sin2x}{sin5xsin3x}dx$

១៥៦. $\int \frac{1}{sin(x-a)sin(x-b)}dx$

១៥៧. $\int \frac{e^x-e^{-x}}{e^x+e^{-x}}dx$

១៥៨. $\int \frac{1}{1+e^{-x}}dx$

១៥៩. $\int \frac{1}{1+e^x}dx$

១៦០. $\int \frac{sin2x}{asin^2x+bsin^2x}dx$

១៦១. $\int \frac{sin(x-a)}{sinx}dx$

១៦២. $\int \frac{sinx}{sin(x-a)}dx$

១៦៣. $\int \frac{sin(x+a)}{sin(x+b)}dx$

១៦៤. $\int \frac{1}{\sqrt{x}(\sqrt{x}+1)}dx$

១៦៥. $\int \frac{1+tanx}{x+ln(secx)}dx$

១៦៦. $\int \frac{sin2x}{sin5xsin3x}dx$

១៦៧. $\int \frac{cosx-sinx}{1+sin2x}dx$

១៦៨. $\int \frac{1}{sin2xcos^2x}dx$

១៦៩. $\int \frac{1}{cos(x-a)cos(x-b)}dx$

១៧០. $\int \frac{x^x(1+lnx)}{x^x+1}dx$

១៧១. $\int \frac{cosx-sinx+1-x}{e^x+sinx+x}dx$

១៧២. $\int 3x^2sin(x^3)dx$

១៧៣. $\int \frac{(1+lnx)^3}{x}dx$

១៧៤. $\int \frac{1}{x^2(1+x^4)}dx$

១៧៥. $\int \frac{1}{\sqrt{x}\left(4+3\sqrt{x}\right)^2}dx$

១៧៦. $\int 3^{3^{3^x}}dx$

១៧៧. $\int tan^3xcosxdx$

១៧៨. $\int \frac{(lnx)^3}{x}dx$

១៧៩. $\int \frac{sinx}{\sqrt{3+2cosx}}dx$

១៨០. $\int \frac{\sqrt{2+lnx}}{x}dx$

១៨១. $\int \frac{1}{1+\sqrt{x}}dx$

១៨២. $\int x^3sin^4xdx$

១៨៣. $\int 5^{5^{5^x}}\cdot 5^{5^x}\cdot 5^x dx$

๑๘๔. $\int \frac{sinx-cosx}{e^x+sinx}dx$

๑๘๕. $\int \frac{1}{x(1+x^3)}dx$

๑๘๖. $\int sin^3xcos^4xdx$

๑๘๗. $\int sinxcos^6xdx$

๑๘๘. $\int sin^5xcos^9xdx$

๑๘๙. $\int sin^2xcos^3xdx$

๑๙๐. $\int sin^4xcos^3xdx$

๑๙๑. $\int sin^6xcos^5xdx$

๑๙๒. $\int sin^3xcos^3xdx$

๑๙๓. $\int sin^5xcos^5xdx$

๑๙๔. $\int sin^5xcos^7xdx$

๑๙๕. $\int sin^2xcos^2xdx$

๑๙๖. $\int sin^2xcos^4xdx$

๑๙๗. $\int sin^4xcos^2xdx$

๑๙๘. $\int sin^3xdx$

๑๙๙. $\int sin^5xdx$

๒๐๐. $\int sin^7xdx$

๒๐๑. $\int cos^5xdx$

๒๐๒. $\int cos^7xdx$

๒๐๓. $\int sin^4xdx$

๒๐๔. $\int sin^4xdx$

๒๐๕. $\int sin^2xdx$

๒๐๖. $\int sin^6xdx$

๒๐๗. $\int cos^6xdx$

๒๐๘. $\int cos^2xdx$

๒๐๙. $\int cos^4xdx$

๒๑๐. $\int \frac{1}{sin^{\frac{3}{2}}xcos^{\frac{5}{2}}x}dx$

๒๑๑. $\int \frac{\sqrt{tanx}}{sinxcosx}dx$

๒๑๒. $\int \frac{1}{sin^3xcos^5x}dx$

๒๑๓. $\int \frac{1}{sin^{\frac{1}{2}}xcos^{\frac{3}{2}}x}dx$

๒๑๔. $\int \frac{sinx}{cos^5x}dx$

๒๑๕. $\int \frac{sin^2x}{cos^6x}dx$

๒๑๖. $\int \frac{1}{sinxcos^3x}dx$

๒๑๗. $\int \frac{1}{sin^2 x cos^4 x} dx$

๒๑๘. $\int \frac{1}{sin^{\frac{1}{2}} x cos^{\frac{7}{2}} x} dx$

๒๑๙. $\int \frac{1}{\sqrt{sin^3 x cos^5 x}} dx$

๒๒๐. $\int \frac{1}{x^2+4} dx$

๒๒๑. $\int \frac{1}{9x^2+1} dx$

๒๒๒. $\int \frac{1}{x^2-4} dx$

๒๒๓. $\frac{x^4-1}{x^2+5} dx$

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

๒๒๕. $\int \frac{x+4}{x^3+4x} dx$

๒๒๖. $\int \frac{x^4+1}{x^2+1} dx$

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

๒๒๘. $\int \frac{1+x}{x^3+x} dx$

๒๒๙. $\int \frac{1+x}{1+x^2} dx$

๒๓๐. $\int \frac{1}{x^4+1} dx$

๒๓๑. $\int \frac{1}{x^3+x} dx$

๒๓๒. $\int \frac{1}{x^3+4x+4} dx$

๒๓๓. $\int \frac{1}{x^2+6x+10} dx$

๒๓๔. $\int \frac{1}{2x^2+5x+6} dx$

๒๓๕. $\int \frac{`1}{x^2+x+1} dx$

๒๓๖. $\int \frac{1}{1+x+x^2} dx$

๒๓๗. $\int \frac{1}{x^2+4x+3} dx$

๒๓๘. $\int \frac{1}{x^2-2ax} dx$

๒๓๙. $\int \frac{1}{x^2+2ax} dx$

๒๔๐. $\int \frac{1}{a^2+2ax} dx$

๒๔๑. $\int \frac{1}{2ax-x^2} dx$

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

๒๔๓. $\int \frac{x^2}{x^6+1} dx$

๒๔๔. $\int \frac{cosx}{sin^2 x+3sinx+2} dx$

๒๔๕. $\int \frac{x^x(1+lnx)}{x^{2x}+x^x+1} dx$

๒๔๖. $\int \frac{x}{x^4+x^2+1} dx$

๒๔๗. $\int \frac{e^x}{e^{2x}+6e^x+5} dx$

๒๔๘. $\int \frac{3x^5}{1+x^2} dx$

๒๔๙. $\int \frac{1}{x(x^n+1)} dx$

$$\text{២៥០.}\quad \int \frac{2x+3}{x^2+4x+5}dx$$

$$\text{២៥១.}\quad \int \frac{3x+2}{x^2-3x+4}dx$$

$$\text{២៥២.}\quad \int \frac{x}{x^2+x+1}dx$$

$$\text{២៥៣.}\quad \int \frac{4x+1}{x^2+3x+2}dx$$

$$\text{២៥៤.}\quad \int \frac{1}{2e^{2x}+3e^x+1}dx$$

$$\text{២៥៥.}\quad \int \frac{(3sinx-2)cosx}{5-cos^2x-4sinx}dx$$

$$\text{២៥៦.}\quad \int \frac{ax^3+bx}{x^4+c^2}dx$$

$$\text{២៥៧.}\quad \int \frac{cosx+sinx}{5+3sin2x}dx$$

$$\text{២៥៨.}\quad \int \frac{sinx-cosx}{3+5sin2x}dx$$

$$\text{២៥៩.}\quad \int \frac{1}{\sqrt{x^2+x+1}}dx$$

$$\text{២៦០.}\quad \int \frac{1}{\sqrt{x^2-2ax}}dx$$

$$\text{២៦១.}\quad \int \frac{1}{\sqrt{4x-x^2}}dx$$

$$\text{២៦២.}\quad \int \frac{1}{\sqrt{6-x-x^2}}dx$$

$$\text{២៦៣.}\quad \int \frac{1}{\sqrt{1+x-x^2}}dx$$

$$\text{២៦៤.}\quad \int \frac{1}{\sqrt{2ax-x^2}}dx$$

$$\text{២៦៥.}\quad \int \frac{x}{\sqrt{x^4-x^2+1}}dx$$

$$\text{២៦៦.}\quad \int \sqrt{secx-1}dx$$

$$\text{២៦៧.}\quad \int \frac{1}{x^{\frac{3}{4}}\sqrt{\sqrt{x}-1}}dx$$

$$\text{២៦៨.}\quad \int \sqrt{\frac{sin(x-\alpha)}{sin(x+\alpha)}}dx$$

$$\text{២៦៩.}\quad \int \frac{e^x}{4-e^{2x}}dx$$

$$\text{២៧០.}\quad \int \frac{sec^x}{\sqrt{16+tanx}}dx$$

$$\text{២៧១.}\quad \int \sqrt{secx+1}dx$$

$$\text{២៧២.}\quad \int \sqrt{cosecx-1}dx$$

$$\text{២៧៣.}\quad \int \frac{1}{\sqrt[3]{x^2}\cdot\sqrt{\sqrt[3]{x^2}-4}}dx$$

$$\text{២៧៤.}\quad \int \frac{cos\theta+sin\theta}{\sqrt{5+sin2\theta}}dx$$

$$\text{២៧៥.}\quad \int \frac{sin\theta-cos\theta}{\sqrt{2-sin2\theta}}dx$$

$$\text{២៧៦.}\quad \int \frac{x-1}{\sqrt{x^2-3x+2}}dx$$

$$\text{២៧៧.}\quad \int \frac{3x+4}{\sqrt{x^2+5x+2}}dx$$

$$\text{២៧៨.}\quad \int \frac{x+2}{\sqrt{x^2+5x+6}}dx$$

$$\text{២៧៩.}\quad \int \frac{6x-5}{\sqrt{3x^2-5x+1}}dx$$

$$\text{២៨០.}\quad \int \sqrt{\frac{a-x}{a+x}}dx$$

๒๘๑. $\int x^2\sqrt{\frac{a^2-x^2}{a^2+x^2}}dx$

๒๘๒. $\int x^2\sqrt{\frac{a^2-x^2}{a^2+x^2}}dx$

๒๘๓. $\int x^2\sqrt{\frac{4-x^3}{4+x^3}}dx$

๒๘๔. $\int \frac{1}{3+4sin^2x}dx$

๒๘๕. $\int \frac{1}{3sin^2x+4cos^2x}dx$

๒๘๖. $\int \frac{1}{(2sinx+3cos^2x)^2}dx$

๒๘๗. $\int \frac{sinxcosx}{sin^4x+cos^4x}dx$

๒๘๘. $\int \frac{1}{(sinx+2cosx)^2}dx$

๒๘๙. $\int \frac{1}{(sinx+2secx)^2}dx$

๒๙๐. $\int \frac{sin2x}{sin^4x+cos^4x}dx$

๒๙๑. $\int \frac{1}{(2sinx+3cosx)^2}dx$

๒๙๒. $\int \frac{1}{2+cos^2x}dx$

๒๙๓. $\int \frac{sinx}{sin3x}dx$

๒๙๔. $\int \frac{cosec3x}{cosecx}dx$

๒๙๕. $\int \frac{1}{1+2sinx}dx$

๒๙๖. $\int \frac{1}{3cosx+4}dx$

๒๙๗. $\int \frac{1}{1+sinx+cosx}dx$

๒๙๘. $\int \frac{1+sinx}{sinx(1+cosx)}dx$

๒๙๙. $\int \frac{1}{3sinx+4cosx+5}dx$

๓๐๐. $\int \frac{1}{cosx+cos\alpha}dx$

๓๐๑. $\int \frac{1}{tanx+4cotx+4}dx$

๓๐๒. $\int \frac{1}{sinx+cosx}dx$

๓๐๓. $\int \frac{1}{\sqrt{3}sinx+cosx}dx$

๓๐๔. $\int \frac{1}{sinx+\sqrt{3}cosx}dx$

๓๐๕. $\int \frac{1}{\sqrt{3}sinx-cosx}dx$

๓๐๖. $\int \frac{2sinx+cosx}{3sinx+2cosx}dx$

๓๐๗. $\int \frac{sinx}{sinx+cosx}dx$

๓๐๘. $\int \frac{2sinx+3cosx}{3sinx+4cosx}dx$

๓๐๙. $\int \frac{sinx}{sinx+cosx}dx$

๓๑๐. $\int \frac{1}{1+tanx}dx$

๓๑๑. $\int \frac{1}{1-tanx}dx$

๓๑๒. $\int \frac{3sinx+2cosx+4}{3cosx+4sinx+5}dx$

๓๑๓. $\int \frac{3cosx+2}{sinx+2cosx+3}dx$

๓๑๔. $\int \frac{2cosx+3sinx}{2sinx+3cosx+5}dx$

๓๑๕. $\int \frac{sinx+2cosx}{9+16sin2x}dx$

๓๑๖. $\int \frac{1}{cosx+cosecx}dx$

๓๑๗. $\int \frac{cosx-sinx}{3+2sin2x}dx$

๓๑๘. $\int \frac{cosx-sinx}{5-7sin2x}dx$

๓๑๙. $\int \frac{2cosx-sinx}{9+16sin2x}dx$

๓๒๐. $\int \frac{x^2+1}{x^4+1}dx$

๓๒๑. $\int \frac{x^2-1}{x^4+1}dx$

๓๒๒. $\int \frac{x^4+1}{x^6+1}dx$

๓๒๓. $\int \frac{x^4+3x+1}{x^4+x^2+1}dx$

๓๒๔. $\int \frac{x^2-1}{x^2+1}\cdot\frac{1}{\sqrt{x^4+1}}dx$

๓๒๕. $\int \frac{x^2-1}{x^3\sqrt{x^4-2x^2+1}}dx$

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

๓๒๗. $\int \frac{1}{x^2\left(x+\sqrt{1+x^2}\right)}dx$

๓๒๘. $\int \frac{x^2-3x-1}{x^4+x^2+1}dx$

๓๒๙. $\int \frac{1}{sin^4x+cos^4x}dx$

๓๓๐. $\int \frac{1}{x^4+1}dx$

๓๓๑. $\int \frac{x^2}{x^4+1}dx$

๓๓๒. $\int \frac{2}{x^4+1}dx$

๓๓๓. $\int \frac{x^4+1}{x^6+1}dx$

๓๓๔. $\int \frac{1}{x^2\sqrt[4]{\sqrt{(1+x^4)^3}}}dx$

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

๓๓๖. $\int \frac{x^x\left(x^{2x}+1\right)(lnx+1)}{x^{4x}+1}dx$

๓๓๗. $\int \frac{x^2-1}{x^3\sqrt{x^4-2x^2+1}}dx$

๓๓๘. $\int \frac{x^{2021}}{(1+x^2)^{2020}}dx$

๓๓๙. $\int \frac{(2x+1)}{\sqrt{(x^2+4x+1)^3}}dx$

๓๔๐. $\int \frac{\sqrt{cotx}-\sqrt{tanx}}{1+3sin2x}dx$

๓๔๑. $\int \sqrt{tanx}dx$

๓๔๒. $\int \sqrt{tanx}-\sqrt{cotx}dx$

๓๔๓. $\int \sqrt{cotx}dx$

៣៤៤. $\int \sqrt{cotx} - \frac{1}{\sqrt{cotx}} dx$

៣៤៥. $\int \sqrt{cotx} + \frac{1}{\sqrt{cotx}} dx$

៣៤៦. $\int \sqrt{tanx} + \frac{1}{\sqrt{tanx}} dx$

៣៤៧. $\int \left(\sqrt[4]{tanx} + \sqrt[4]{cotx}\right)^2 dx$

៣៤៨. $\int \frac{1}{\left(\sqrt{sinx} + \sqrt{cotx}\right)^2} dx$

៣៤៩. $\int x^2 sinx dx$

៣៥០. $\int lnx dx$

៣៥១. $(lnx)^2 dx$

៣៥២. $\int (lnx + 1) dx$

៣៥៣. $\int tan^{-1}x dx$

៣៥៤. $\int cot^{-1}\left(\frac{1-x^2}{1+x^2}\right) dx$

៣៥៥. $\int e^{\sqrt{x}} dx$

៣៥៦. $\int \frac{x + sinx}{1 + cosx} dx$

៣៥៧. $\int tan^{-1}\left(\sqrt{\frac{1-x}{1+x}}\right) dx$

៣៥៨. $\int \frac{sin^{-1}\sqrt{x} - cos^{-1}\sqrt{x}}{sin^{-1}\sqrt{x} + cos^{-1}\sqrt{x}} dx$

៣៥៩. $\int \frac{x^2}{(xsinx + cosx)^2} dx$

៣៦០. $\int \frac{xtan^{-1}x}{(1+x^2)^{\frac{3}{2}}} dx$

៣៦១. $\int sin^{-1}\left(\sqrt{\frac{x}{a+x}}\right) dx$

៣៦២. $\int ln(1+x) dx$

៣៦៣. $\int \frac{x - sinx}{1 - cosx} dx$

៣៦៤. $\int sin\sqrt{x} dx$

៣៦៥. $\int xln(1+x) dx$

៣៦៦. $\int (sin^{-1}x)^2 dx$

៣៦៧. $\int xsin^3 x dx$

៣៦៨. $\int x\left(\frac{sec2x - 1}{sec2x + 1}\right) dx$

៣៦៩. $\int sin^{-1}\left(\frac{2x}{1-x^2}\right) dx$

៣៧០. $\int tan^{-1}\left(\frac{2x}{1-x^2}\right) dx$

៣៧១. $\int \frac{x^3 sin^{-1}x^2}{\sqrt{1-x^4}} dx$

៣៧២. $\int xe^x dx$

៣៧៣. $\int xsinx dx$

៣៧៤. $\int \frac{secx\,(2 + secx)}{(1 + 2secx)^2} dx$

៣៧៥. $\int \frac{1-x}{e^x + x} dx$

៣៧៦. $\int e^x\left(sinx+cosx\right)dx$

៣៧៧. $\int \frac{xe^x}{\left(1+x\right)^2}dx$

៣៧៨. $\int e^x\left(\frac{2+sin2x}{1+cos2x}\right)dx$

៣៧៩. $\int e^x\left[\frac{1+x+x^3}{\sqrt{\left(1+x^2\right)^3}}\right]dx$

៣៨០. $\int e^x\left(\frac{x^2+1}{\left(x+1\right)^2}\right)dx$

៣៨១. $\int e^x\left(\frac{1}{x}-\frac{1}{x^2}\right)dx$

៣៨២. $\int e^x\left(\frac{x}{\left(x+1\right)}^2\right)dx$

៣៨៣. $\int e^x\left(\frac{1-sinx}{1-cosx}\right)dx$

៣៨៤. $\int e^x\left(\frac{2+sin2x}{1+cos2x}\right)dx$

៣៨៥. $\int \frac{lnx}{\left(1+lnx\right)^2}dx$

៣៨៦. $\int e^x\left(lnx+\frac{1}{x}\right)dx$

៣៨៧. $\int e^x\left[\frac{x}{\left(x+1\right)^3}\right]dx$

៣៨៨. $\int \left[\frac{1}{lnx}-\frac{1}{\left(lnx\right)^2}\right]dx$

៣៨៩. $\int e^x\left(\frac{1-x}{1+x}\right)^2dx$

៣៩០. $\int e^x\left[\frac{x^2+1}{\left(x+1\right)^2}\right]dx$

៣៩១. $\int e^x\left[\frac{x+1+\sqrt{1-x^2}}{\left(x+1\right)^2\sqrt{1-x^2}}\right]dx$

៣៩២. $\int e^x\left(2sec^2x-1\right)tanxdx$

៣៩៣. $\int e^x\left(\frac{xcos^3x-sinx}{cos62x}\right)dx$

៣៩៤. $\int e^x\left(lnx+\frac{1}{x^2}\right)dx$

៣៩៥. $\int \left[ln(lnx)+\frac{1}{\left(lnx\right)^2}\right]dx$

៣៩៦. $\int e^x\left[\frac{x^4+2}{\sqrt{\left(1+x^2\right)^5}}\right]dx$

៣៩៧. $\int \frac{e^{sinx}\left(xcos^3x-sinx\right)}{cos^2x}dx$

៣៩៨. $\int e^x\left[\frac{x^3-x+2}{\left(x^2-1\right)^2}\right]dx$

៣៩៩. $\int e^{3x}\left(3sinx+cosx\right)dx$

៤០០. $\int e^{2x}\left(sec^2x+2tanx\right)dx$

៤០១. $\int e^{2x}\left(\frac{2sin4x-4}{1-cos4x}\right)dx$

៤០២. $\int e^{2x}\left(-sinx+2cosx\right)dx$

៤០៣. $\int e^{2x}\left(\frac{1+sin2x}{1+cos2x}\right)dx$

៤០៤. $\int e^{-\frac{x}{2}}\sqrt{\frac{1-sinx}{1+cosx}}dx$

៤០៥. $\int e^xsin3xdx$

៤០៦. $\int e^{4x}cos3xdx$

៤០៧. $\int e^{2x}sin3xdx$

៤០៨. $\int e^{-x}cosxdx$

៤០៩. $\int e^{2x}cos(3x+4)dx$

៤១០. $\int e^{x}cos2xdx$

៤១១. $\int \frac{1}{x^3}sin(lnx)dx$

៤១២. $\int \sqrt{4-x^2}dx$

៤១៣. $\int \sqrt{1-9x^2}dx$

៤១៤. $\int \sqrt{x^2+1}dx$

៤១៥. $\int \sqrt{3x^2+1}dx$

៤១៦. $\int \sqrt{4x^2-1}dx$

៤១៧. $\int \sqrt{x^2-9}dx$

៤១៨. $\int \sqrt{x^2+2x+3}dx$

៤១៩. $\int \sqrt{3-4x-x^2}dx$

៤២០. $\int \sqrt{2ax-x^2}dx$

៤២១. $\sqrt{2ax+x^2}dx$

៤២២. $\int \sqrt{x-4x^2}dx$

៤២៣. $\int (2x+1)\sqrt{x^2+3x+4}dx$

៤២៤. $\int (x-5)\sqrt{x^2+x}dx$

៤២៥. $\int (3x-2)\sqrt{x^2+x+1}dx$

៤២៦. $\int (4x+1)\sqrt{x^2-x-2}dx$

៤២៧. $\int x\sqrt{1+x-x^2}dx$

៤២៨. $\int \frac{2x+1}{(x+2)(x+3)}dx$

៤២៩. $\int \frac{1}{(x-1)(x-2)}dx$

៤៣០. $\int \frac{1}{(x+1)(x+2)(x+3)}dx$

៤៣១. $\int \frac{x-1}{(x+1)(x-2)}dx$

៤៣២. $\int \frac{2x-1}{(x+1)(x+2)(x+3)}dx$

៤៣៣. $\int \frac{x^3}{(x-1)(x-2)}dx$

៤៣៤. $\int \frac{2x}{(x^2+1)(x^2+2)}dx$

៤៣៥. $\int \frac{cos\theta}{(2+cos\theta)(3+cos\theta)}dx$

៤៣៦. $\int \frac{1-cosx}{cosx(1+cosx)}dx$

៤៣៧. $\int \frac{1}{(x+1)(x+1)^2}dx$

៤៣៨. $\int \frac{1}{sinx-cosx}dx$

๔๓๙. $\int \frac{2x+1}{(x+2)(x-3)^2}dx$

๔๔๐. $\int \frac{3x+1}{(x-1)^2(x+3)}dx$

๔๔๑. $\int \frac{x^2+1}{(x-1)(x+3)}dx$

๔๔๒. $\int \frac{x^2}{(x-1)^3(x+1)}dx$

๔๔๓. $\int \frac{x-1}{x^2(x-4)}dx$

๔๔๔. $\int \frac{2x-1}{x^3(x-2)}dx$

๔๔๕. $\int \frac{2x+3}{(x+1)(x^2+4)}dx$

๔๔๖. $\int \frac{3x-2}{(x-1)(x^2-9)}dx$

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

๔๔๘. $\int \frac{x}{(x+1)(x^2+4)}dx$

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

๔๕๐. $\int \frac{x^2}{(x^2-3)(x^2+4)}dx$

๔๕๑. $\int \frac{x^2+4}{(x^2+5)(x^2+7)}dx$

๔๕๒. $\int \frac{x^2}{(x^2-1)(x^2-2)}dx$

๔๕๓. $\int \frac{x^2}{(x^2-1)(x^2-2)(x^2-3)}dx$

๔๕๔. $\int \frac{(x^2+3)(x^2+1)}{(x^2-1)(x^2+2)}dx$

๔๕๕. $\int \frac{(x^2-1)(x^2+3)}{(x^2+2)(x^2+1)}dx$

๔๕๖. $\int \frac{1}{x(x^7+1)}dx$

๔๕๗. $\int \frac{1}{x^2(x^4+1)^{\frac{3}{4}}}dx$

๔๕๘. $\int \frac{1}{x(x^5+1)}dx$

๔๕๙. $\int \frac{1}{x(x^4+1)}dx$

๔๖๐. $\int \frac{1}{x^2(x^7+1)^{\frac{6}{7}}}dx$

๔๖๑. $\int \frac{1}{x(1+x^3)^{\frac{1}{3}}}dx$

๔๖๒. $\int \frac{x^2}{(x+3)^2}dx$

๔๖๓. $\int \frac{x^2}{(x+2)^3}dx$

๔๖๔. $\int \frac{x^2}{(ax+b)^2}dx$

๔๖๕. $\int \frac{1}{x(1+x^3)^2}dx$

๔๖๖. $\int \frac{x^4}{(3x-2)^3}dx$

๔๖๗. $\int \frac{1}{x^2(3x+2)^3}dx$

๔๖๘. $\int \frac{1}{x^3(b+ax)^2}dx$

๔๖๙. $\int \frac{1}{x^2(1+x^2)^3}dx$

๔๗๐. $\int \frac{1}{x^2(a-bx)^2}dx$

๔๗๑. $\int \frac{1}{x^4(2x+1)^3}dx$

๔๗๒. $\int tan^4 x sec^2 x dx$

๔๗๓. $\int sec^3 x dx$

๔๗๔. $\int sec^5 x dx$

๔๗๕. $\int tan^2 x sec^4 x dx$

๔๗๖. $\int tan^3 x sec^6 x dx$

๔๗๗. $\int tan^3 x sec^5 x dx$

๔๗๘. $\int sec^7 x dx$

๔๗๙. $\int sec^9 x dx$

๔๘๐. $\int cosec^2 x cot^2 x dx$

๔๘๑. $\int cot^3 x cosec^3 x dx$

๔๘๒. $\int cosecs^3 x dx$

๔๘๓. $\int cot^2 x cosec^4 x dx$

๔๘๔. $\int tan^{-5} x sec^6 x dx$

๔๘๕. $\int cot^3 x cosec^{-8} x dx$

๔๘๖. $\int cosec^5 x dx$

๔๘๗. $\int cosec^7 x dx$

๔๘๘. $\int \frac{1}{(x-3)^3(x-2)^4}dx$

๔๘๙. $\int \frac{1}{\sqrt[4]{(x-1)^3(x-2)^2}}dx$

๔๙๐. $\int \frac{1}{(x-1)^3(x-2)^2}dx$

๔๙๑. $\int \frac{1}{(x-3)^{\frac{3}{2}}(x-2)^{\frac{7}{2}}}dx$

๔๙๒. $\int \frac{1}{\sqrt[5]{(x+4)^4(x+3)^7}}dx$

๔๙๓. $\int \frac{1}{x(2+3x^3)}dx$

๔๙๔. $\int \frac{1}{x(3+5x^5)}dx$

๔๙๕. $\int \frac{1}{x(2+3x^2)}dx$

๔๙๖. $\int \frac{1}{x(3+4x^3)}dx$

๔๙๗. $\int \frac{1}{x(2-5x^3)}dx$

๔๙๘. $\int \frac{1}{x(1-4x^4)}dx$

๔๙๙. $\int \frac{1}{x(3x^4+1)}dx$

๕๐๐. $\int \frac{x^5}{(x^2-1)^4}dx$

๕๐๑. $\int \frac{x^9}{(2x^2+3)^5}dx$

๕๐๒. $\int \frac{x^3}{(x^2+1)^4}dx$

៥០៣. $\int \frac{x^7}{(3x^2-2)^4}dx$

៥០៤. $\int \frac{8x^9}{(3x^2-2)^5}dx$

៥០៥. $\int \frac{10x^{11}}{(3x^2+5)^4}dx$

៥០៦. $\int \frac{2sinx+3}{(3sinx+2)^2}dx$

៥០៧. $\int \frac{2sinx+5}{(2+5sinx)^2}dx$

៥០៨. $\int \frac{3sinx-2}{(2-3sinx)^2}dx$

៥០៩. $\int \frac{4cos3x+3}{(3cosx+4)^2}dx$

៥១០. $\int \frac{cosx+2}{(1+2cosx^2}dx$

៥១១. $\int \frac{3cosx+4}{(3+4cosx)^2}dx$

៥១២. $\int \frac{1}{(3+4sinx)^2}dx$

៥១៣. $\int \frac{1}{(5+4sinx)^2}dx$

៥១៤. $\int \frac{1}{(1-2sinx)^2}dx$

៥១៥. $\int \frac{1}{(2+3cosx)^2}dx$

៥១៦. $\int \frac{1}{(12+13cosx)^2}dx$

៥១៧. $\int \frac{4e^x+6e^{-x}}{9e^x+5e^{-x}}dx$

៥១៨. $\int \frac{3e^x-2e^{-x}}{2e^x+5e^{-x}}dx$

៥១៩. $\int \frac{4e^x+3e^{-x}}{3e^x+7e^{-x}}dx$

៥២០. $\int \frac{1}{\sqrt{(x+2)^2(x+1)^3}}dx$

៥២១. $\int \sqrt{\frac{x+2}{2x+3}}\cdot\frac{dx}{x}$

៥២២. $\int \frac{x+1}{(x+2)\sqrt{(x+3)^3}}dx$

៥២៣. $\int \frac{2}{(2-x)^2}\cdot\sqrt[3]{\frac{2-x}{2+x}}dx$

៥២៤. $\int \frac{1}{\sqrt{x+1}+\sqrt[3]{x+1}}dx$

៥២៥. $\int \frac{1}{\sqrt{x+1}-\sqrt[4]{x+1}}dx$

៥២៦. $\int \frac{1}{\sqrt{x}+\sqrt[3]{x}}dx$

៥២៧. $\int \frac{1+\sqrt{x}-\sqrt[3]{x}}{1+\sqrt[3]{x}}dx$

៥២៨. $\int \frac{\sqrt{x}}{\sqrt[4]{x^3+1}}dx$

៥២៩. $\int \frac{\sqrt{x}}{\sqrt{x}+\sqrt[3]{x}}dx$

៥៣០. $\int \frac{1}{(x+3)\sqrt{x+2}}dx$

៥៣១. $\int \frac{\sqrt{x}}{x+1}dx$

៥៣២. $\int \frac{1}{x\sqrt{x-2}}dx$

៥៣៣. $\int \frac{1}{(x+3)\sqrt{x}}dx$

៥៣៤. $\int \frac{1}{(x+3)\sqrt{2x+1}}dx$

៥៣៥. $\int \frac{1}{x^2\sqrt{x-1}}dx$

៥៣៦. $\int \frac{1}{(x^2-4)\sqrt{x+1}}dx$

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

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

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

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

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

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

៥៤៣. $\int \frac{1}{(x-1)\sqrt{x^2+4}}dx$

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

៥៤៥. $\int \frac{1}{(3x+2)\sqrt{x^2-4}}dx$

៥៤៦. $\int \frac{1}{x^2\sqrt{x^2-1}}dx$

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

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

៥៤៩. $\int \frac{x}{(x^4-1)\sqrt{x^4+3}}dx$

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

៥៥១. $\int \left(x+\sqrt{x^2+1}\right)^{10}dx$

៥៥២. $\int \left(x-\sqrt{x^2+4}\right)^{5}dx$

៥៥៣. $\int \left(x+\sqrt{1+x^2}\right)^{n}dx$

៥៥៤. $\int \frac{1}{\left(x+\sqrt{x^2-4}\right)^{\frac{5}{3}}}dx$

៥៥៥. $\int \frac{1}{\left(x-\sqrt{x^2+9}\right)^{10}}dx$

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

៥៥៧. $\int \frac{1}{\sqrt{x}\cdot\sqrt{((2+3x))^3}}dx$

៥៥៨. $\int \frac{1}{x^{\frac{2}{3}}(2+3x)^{\frac{4}{3}}}dx$

៥៥៩. $\int \frac{1}{x^{\frac{3}{4}}(3x-1)^{\frac{5}{4}}}dx$

៥៦០. $\int \frac{1}{x^{\frac{1}{3}}(2x+1)^{\frac{5}{3}}}dx$

៥៦១. $\int \frac{1}{\sqrt{x}(2+3x)^{\frac{5}{2}}}dx$

៥៦២. $\int \frac{1}{x^2(2+3x^2)^{\frac{5}{2}}}dx$

៥៦៣. $\int \frac{1}{(x-1)^3(x+2)^4}dx$

៥៦៤. $\int \frac{1}{(x-1)^3(x-2)^2}dx$

៥៦៥. $\int \frac{1}{(x-1)^2(x-2)^2}dx$

៥៦៦. $\int \frac{1}{\sqrt[4]{(x-1)^3(x+2)^5}}dx$

៥៦៧. $\int \frac{1}{x^2(x+5)^4}dx$

៥៦៨. $\int \frac{1}{(x-1)^{\frac{3}{2}}(x+1)^{\frac{5}{2}}}dx$

៥៦៩. $\int \frac{1}{x\sqrt{5x^4+3}}dx$

៥៧០. $\int \frac{1}{x\sqrt{3x^3+4}}dx$

៥៧១. $\int \frac{1}{x\sqrt{2-5x^6}}dx$

៥៧២. $\int \frac{1}{x\sqrt{3x^9-2}}dx$

៥៧៣. $\int \frac{1}{x\sqrt{3x-2}}dx$

៥៧៤. $\int \frac{1}{x\sqrt{2x^{10}-3}}dx$

៥៧៥. $\int \frac{1}{(c+dx^2)^{\frac{3}{2}}}dx$

៥៧៦. $\int \frac{1}{(3+5x^2)^{\frac{3}{2}}}dx$

៥៧៧. $\int \frac{1}{(3-4x^2)^{\frac{3}{2}}}dx$

៥៧៨. $\int \frac{x}{(2-5x^4)^{\frac{3}{2}}}dx$

៥៧៩. $\int \frac{x^2}{(1-4x^6)^{\frac{3}{2}}}dx$

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

៥៨១. $\int \frac{1}{(x+1)^3\sqrt{x^2+2x+4}}dx$

៥៨២. $\int \frac{1}{(x-2)^3\sqrt{4x^2-16x+20}}dx$

៥៨៣. $\int \frac{1}{(x-3)^2}\sqrt{4x^2+4x+7}dx$

៥៨៤. $\int \frac{1}{(x+1)^3\sqrt{x^2+2x-4}}dx$

៥៨៥. $\int \frac{2x+3}{(3x+4)\sqrt{x^2+2x+4}}dx$

៥៨៦. $\int \frac{2x+3}{(x+1)\sqrt{x^2+4x+7}}dx$

៥៨៧. $\int \frac{4x+7}{(x+2)\sqrt{x^2+4x+7}}dx$

៥៨៨. $\int \frac{x^2+4x+2}{(x+1)\sqrt{x^2+2x+3}}dx$

៥៨៩. $\int \frac{x^2+5x+6}{(x+2)\sqrt{x^2+5x+4}}dx$

៥៩០. $\int \frac{x^2+10x+6}{(x+2)\sqrt{x^2+4x+9}}dx$

៥៩១. $\int \sqrt[3]{x}\left(1+\sqrt{x}\right)^3 dx$

៥៩២. $\int \sqrt[3]{x^2}\left(3+x^{-\frac{2}{3}}\right)^{-2} dx$

๕๙๓. $\int \frac{\sqrt{1+\sqrt[4]{x}}}{\sqrt[3]{x^4}}dx$

๕๙๔. $\int \frac{1}{x^7\sqrt{1+x64}}dx$

๕๙๕. $\int \frac{1}{\sqrt{x}\left(\sqrt[4]{x}+1\right)^{10}}dx$

๕๙๖. $\int x^{-\frac{1}{2}}\left(2+3x^{\frac{1}{3}}\right)^{-2}dx$

๕๙๗. $\int \sqrt[3]{x}\cdot\sqrt[7]{\left(1+\sqrt[3]{x^4}\right)}dx$

๕๙๘. $\int \frac{1}{x\sqrt[3]{1+x^5}}dx$

๕๙๙. $\int x^{-6}\left(1+2x^3\right)^{\frac{2}{3}}dx$

๖๐๐. $\int x^{11}\sqrt{1+x^4}dx$

๖๐๑. $\int \frac{\sqrt[3]{\left(1+\sqrt[4]{x}\right)}}{\sqrt[4]{x^3}}dx$

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

๖๐๓. $\int \frac{1}{x+\sqrt{x^2-x+1}}dx$

๖๐๔. $\int \frac{x}{\sqrt{7x-10-x^2}}dx$

๖๐๕. $\int \frac{1}{x-\sqrt{x^2-x+2}}dx$

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

๖๐๗. $\int \frac{1}{x\sqrt{x^2-3x+2}}dx$

๖๐๘. $\int \frac{1}{x+\sqrt{x^2-1}}dx$

๖๐๙. $\int \frac{x}{x+\sqrt{x^2-1}}dx$

๖๑๐. $\int \frac{sin3x}{sinx}dx$

๖๑๑. $\int \frac{sin5x}{sinx}dx$

๖๑๒. $\int \frac{sin6x}{sinx}dx$

๖๑๓. $\int \frac{sin8x}{sinx}dx$

๖๑๔. $\int \frac{1}{(x^2+2)^2}dx$

๖๑๕. $\int \frac{1}{(x^2+3)^3}dx$

๖๑๖. $\int \frac{x+1}{(x^2+3x+2)^2}dx$

๖๑๗. $\int x^2 lnxdx$

๖๑๘. $\int x^2\left(lnx\right)^2dx$

๖๑๙. $\int x^3\left(lnx\right)^2dx$

๖๒๐. $\int x^2(1-x)^3dx$

๖๒๑. $\int sin^8xdx$

๖๒๒. $\int cos^{10}xdx$

๖๒๓. $\int tan^8xdx$

๖๒๔. $\int cot^8xdx$

ឲ២៥. $\int cot^9 x dx$

ឲ២៦. $\int x^n e^x dx$

ឲ២៧. $\int x^2 cosx dx$

ឲ២៨. $\int e^x cos^2 x dx$

ឲ២៩. $\int \frac{sinx}{sin3x} dx$

ឲ៣០. $\int tan^3 x sec2x dx$

ឲ៣១. $\int \frac{xcosx+1}{\sqrt{2x^3 e^{sinx}+x^2}} dx$

ឲ៣២. $\int \frac{ln|x|}{x\sqrt{1+ln|x|}} dx$

ឲ៣៣. $\int \frac{1}{x^6+x^4} dx$

ឲ៣៤. $\int \frac{2sinx+5}{(2+5sinx)^2} dx$

ឲ៣៥. $\int \frac{lnx-1}{1+ln^2 x} dx$

ឲ៣៦. $\int \frac{cosec^2 x-2005}{cos^{2005} x} dx$

ឲ៣៧. $\int \frac{sin2x+2tanx}{cos^6 x+6cos^2 x+4} dx$

ឲ៣៨. $\int e^x \left[\frac{x-1}{(x+1)^3}\right] dx$

ឲ៣៩. $\int \frac{1}{x} ln\left(\frac{x}{e^x}\right) dx$

ឲ៤០. $\int \frac{1}{(1+\sqrt{x})\sqrt{x-x^2}} dx$

ឲ៤១. $\int \frac{cosx-sinx}{\sqrt{8-sin2x}} dx$

ឲ៤២. $\int \frac{cos^3 x+cos^5 x}{sin^2 x+sin^4 x} dx$

ឲ៤៣. $\int \frac{cos4x+1}{cotx-tanx} dx$

ឲ៤៤. $\int \sqrt{\frac{sinx}{2sinx+3cosx}} dx$

ឲ៤៥. $\int \frac{x+1}{x(1+xe^x)^2} dx$

ឲ៤៦. $\int \frac{\left(x+\sqrt{1+x^2}\right)^3}{\sqrt{1+x^2}} dx$

ឲ៤៧. $\int \frac{\sqrt{1+x^8}}{x^{13}} dx$

ឲ៤៨. $\int e^x \left(\frac{x+2}{x+4}\right)^2 dx$

ឲ៤៩. $\int \frac{dx}{\sqrt{sin(x+\alpha)cos^3(x-\beta)}} dx$

ឲ៥០. $\int \frac{x^2+6}{(xsinx+3cosx)^6} dx$

ឲ៥១. $\int \frac{ln\left(1+sin^2 x\right)}{cos^2 x} dx$

ឲ៥២. $\int \frac{1+xcosx}{x\left(1-x^2 e^{2sinx}\right)} dx$

ឲ៥៣. $\int \frac{1-xsinx}{x\left(1-x^3 e^{3cosx}\right)} dx$

ឲ៥៤. $\int \frac{\sqrt{3cos2x-1}}{cosx} dx$

ឲ៥៥. $\int \frac{e^x(2-x^2)}{(1-x)\sqrt{1-x^2}} dx$

៦៥៦. $\int \frac{e^{tan^{-1}x}}{1+x^2}\left[\left(sec^{-1}\sqrt{1+x^2}\right)^2+cos^{-1}\left(\frac{1-x^2}{1+x^2}\right)\right]dx$

៦៥៧. $\int e^x\left[\frac{2sin^2x-1}{cosx}+\frac{cosx(2sinx+1)}{1+sinx}\right]dx$

៦៥៨. $\int e^{xsinx+cosx}\left(\frac{x^4cos^3x-xsinx+cosx}{x^2cos^2x}\right)dx$

៦៥៩. $\int \frac{(1+x)sinx}{(x^2+2x)cos^2x-(1+x)sin2x}dx$

៦៦០. $\int \frac{(x-1)\sqrt{x^4+2x^3-x^2+2x+1}}{x^2(x+1)}dx$

៦៦១. $\int \sqrt{1+2cotx(cotx+cosecx)}dx$

៦៦២. $\int \frac{x^2-x^3}{(x+1)(x^3+x^2+x)^{\frac{3}{2}}}dx$

៦៦៣. $\int 3x^2tan\left(\frac{1}{x}\right)-xsec^2\left(\frac{1}{x}\right)dx$

៦៦៤. $\int \frac{1}{(x+1)(x+2)(x+3)(x+4)}dx$

៦៦៥. $\int \left(\frac{1}{1-x^8}\right)\left[cos^{-1}\left(\frac{2x}{1+x^2}\right)+tan^{-1}\left(\frac{2x}{1-x^2}\right)\right]dx$

៦៦៦. $\int e^{2x}\left[2ln(secx+tanx)+secx\right]dx$

៦៦៧. $\int e^x\left[ln\left(secx+tanx\right)+secx\right]dx$

៦៦៨. $\frac{1-x^2}{1+x^2}\cdot\frac{1}{\sqrt{1+x^2+x^4}}dx$

៦៦៩. $\int \frac{x-1}{x+1}\cdot\frac{1}{\sqrt{x^3+x^2+x}}dx$

៦៧០. $\int \frac{cos^4x}{sin^3x(sin^5x+cos^5x)^{\frac{3}{5}}}dx$

៦៧១. $\int \frac{x^2+3x+2}{(x^2+1)^2(x+1)}dx$

៦៧២. $\int tan(x-\alpha)\cdot tan(x+\alpha)\cdot tan2xdx$

៦៧៣. $\int \left(e^{\log x}+\sin x\right)\cos xdx$

៦៧៤. $\int \left(\frac{1}{x^{1/3}+x^{1/4}}+\frac{\log\left(1+x^{1/6}\right)}{\sqrt{x}+x^{1/3}}\right)dx$

៦៧៥. $\int (cosx-sinx)(2+3sin2x)dx$

៦៧៦. $\int \left[1+tan\left(\frac{5\pi}{16}-x\right)\right]\left[1+tan\left(-\frac{\pi}{16}+x\right)\right]dx$

៦៧៧. $\int (sinx+cosx)(2+3sin2x)dx$

៦៧៨. $\int \frac{sin^3x}{(cos^4x+3cos^2x+1)tan^{-1}(secx+cosx)}dx$

៦៧៩. $\int \left(\frac{x+\sqrt[3]{x^2}+\sqrt[4]{x}}{x+\sqrt[3]{x^4}}\right)dx$

៦៨០. $\int \sin^{-1}\left(-\frac{2x+2}{\sqrt{4x^2+8x+13}}\right)dx$

៦៨១. $\int \frac{tan\left(\frac{\pi}{4}-4\right)}{cos^2x\sqrt{tan^3x+tan^2x+tanx}}dx$

៦៨២. $\int \frac{\sqrt{\sin x-\sin^3 x}}{1-\sin^3 x}dx$

៦៨៣. $\int \frac{(x-1)dx}{(x+1)\sqrt{x^3+x^2+x}}$

៦៨៤. $\int \cos(2\theta)\times\log\left(\frac{\cos\theta+\sin\theta}{\cos\theta-\sin\theta}\right)d\theta$

៦៨៥. $\int (sinx-cosx)(3-4sin2x)dx$

๖๘๖. $\int \frac{1}{cosx\sqrt{sin(2x+\alpha)+sin\alpha}}dx$

๖๘๗. $\int \frac{\sec^2 x}{(\sec x+\tan x)^{9/2}}dx$

๖๘๘. $\int \frac{\tan 2\theta}{\sqrt{\sin^6\theta+\cos^6\theta}}d\theta$

๖๘๙. $\int_0^{\frac{\pi}{2}} 2sinxcosxtan^{-1}(sinx)dx$

๖๙๐. $\int \frac{\cos x-\sin x+1-x}{e^x+\sin x+x}dx$

๖๙๑. $\int_0^{\frac{\pi}{2}} [2ln(sinx)-ln(sin2x)]\,dx$

๖๙๒. $\int \frac{1}{sin^4x+sin^2xcos^2x+cos^4x}dx$

๖๙๓. $\int \frac{\sqrt{x^2+1}\left[ln(x^2+1)-2lnx\right]}{x^4}dx$

๖๙๔. $\int \left[1+tan\left(x+\frac{3\pi}{8}\right)\right]\left[1+tan\left(\frac{\pi}{8}-x\right)\right]dx$

๖๙๕. $\int \frac{\cos\theta+\sin\theta}{\sqrt{5+\sin\theta(2\theta)}}d\theta$

๖๙๖. $\int \frac{sin^3x}{(cos^4x+3cos^2x)\,tan^{-1}(secx+cosx)}dx$

๖๙๗. $\int tan^{-1}\left[\frac{\sqrt{1+sinx}+\sqrt{1-sinx}}{\sqrt{1+sinx}-\sqrt{1+sinx}}\right]dx$

๖๙๘. $\int \left(\frac{cosx-sinx}{cosx+sinx}\right)\times(2+2sin2x)dx$

๖๙๙. $\int e^x\left[\frac{1}{\sqrt{1+x^2}}+1-\frac{2x^2}{\sqrt{1+x^2}^5}\right]dx$

๗๐๐. $\int \left(x^{3m}+x^{2m}+x^m\right)\left(2x^{2m}+3x^m+6\right)^{1/m}dx$

2 អាំងតេក្រាលកំណត់

១. $\int_0^1 \sqrt{\frac{1-x}{1+x}}dx$

២. $\int_{-1}^4 2x-3dx$

៣. $\int_0^{2\pi} sin^{-1}(sinx)dx$

៤. $\int_{-2}^1 \left\{x\left[1+cos\left(\frac{\pi x}{2}\right)\right]\right\}dx$

៥. $\int_0^2 xdx$

៦. $\int_0^2 x^2dx$

៧. $\int_1^3 x^2+x+2dx$

៨. $\int_0^1 e^{mx}dx$

៩. $\int_0^{\pi/2} sinxdx$

១០. $\int_1^2 2x+3dx$

១១. $\int_0^2 2x^2+1dx$

១២. $\int_0^2 x^2+3xdx$

១៣. $\int_0^3 x^2-5x+4dx$

១៤. $\int_0^4 x^3-4dx$

១៥. $\int_0^4 3x^3+2dx$

១៦. $\int_0^4 2x^3-3dx$

១៧. $\int_0^1 e^xdx$

១៨. $\int_0^1 e^{3x}+e^xdx$

១៩. $\int_a^b cosxdx$

២០. $\int_0^4 |x-2|dx$

២១. $\int_0^4 |x|+|x-2|dx$

២២. $\int_{-3}^3 |x+2|+|x|+|x-2|dx$

២៣. $\int_1^4 |x-1|+|x-2|+|x-3|dx$

២៤. $\int_0^3 |x^2-3x+2|dx$

២៥. $\int_{-4}^3 |x^2-4|dx$

២៦. $\int_0^\pi |sinx|dx$

២៧. $\int_0^\pi ||sinx|-|cosx||dx$

២៨. $\int_{-1}^{3/2} |sin(\pi x)|dx$

២៩. $\int_{-\pi/2}^{2\pi} sin^{-1}(sinx)dx$

៣០. $\int_{1/e}^{e} |lnx|dx$

៣១. $\int_{0}^{\sqrt{3}} tan^{-1}\left(\frac{2x}{1-x^2}\right)dx$

៣២. $\int_{-\pi/2}^{\pi/2} cos|x| + sin|x|dx$

៣៣. $\int_{0}^{2} \left|cos\left(\frac{\pi x}{2}\right)\right|dx$

៣៤. $\int_{0}^{\pi/2} \frac{sin^n x}{sin^n x + cos^n x}dx$

៣៥. $\int_{0}^{\infty} \frac{1}{(1+x^a)(1+x^2)}dx$

៣៦. $\int_{0}^{\pi/4} ln(1+tanx)dx$

៣៧. $\int_{0}^{1} tan^{-1}\left(\frac{2x-1}{1+x-x^2}\right)dx$

៣៨. $\int_{0}^{1} cot^{-1}\left(1-x+x^2\right)dx$

៣៩. $\int_{0}^{\pi} \frac{1}{1+2^{tanx}}dx$

៤០. $\int_{0}^{1} ln\left(\frac{1}{x}-1\right)dx$

៤១. $\int_{0}^{1} \frac{ln(1+x)}{1+x^2}dx$

៤២. $\int_{0}^{1} x(1-x)^{2021}dx$

៤៣. $\int_{0}^{\pi} \frac{x}{1+sinx}dx$

៤៤. $\int_{0}^{\pi/2} cos\left(isin^2 x\right)dx$

៤៥. $\int_{0}^{\pi} \left(\frac{x}{a^2cos^2x + b^2sin^2x}\right)dx$

៤៦. $\int_{0}^{\pi} \frac{e^{cosx}}{e^{cosx} + e^{-cosx}}dx$

៤៧. $\int_{1}^{2} \frac{5x^2}{x^2+4x+3}dx$

៤៨. $\int_{\frac{\pi}{6}}^{\frac{\pi}{3}} \frac{sinx + cosx}{\sqrt{sin2x}}dx$

៤៩. $\int_{0}^{\pi} \frac{xtanx}{secx + tanx}dx$

៥០. $\int_{0}^{\frac{\pi}{2}} \frac{x + sinx}{1 + cosx}dx$

៥១. $\int_{0}^{1} ln\left(\frac{1}{x}-1\right)dx$

៥២. $\int_{0}^{1} \frac{x^4+1}{x^2+1}dx$

៥៣. $\int_{-1}^{2} \left|x^3 - x\right|dx$

៥៤. $\int_{0}^{1} \frac{ln(1+x)}{1+x^2}dx$

៥៥. $\int_{0}^{\frac{\pi}{4}} \frac{sinx + cosx}{9 + 16sin2x}dx$

៥៦. $\int_{0}^{1} \frac{e^x}{1+e^{2x}}dx$

៥៧. $\int_{0}^{\frac{\pi}{4}} \frac{sin2\theta}{sin^4\theta + cos^4\theta}d\theta$

៥៨. $\int_{\frac{\pi}{6}}^{\frac{\pi}{3}} \frac{dx}{1+\sqrt{cotx}}dx$

๕๙. $\int_0^1 \frac{xtanx}{secxcosecx}dx$

๖๐. $\int_0^{\pi} \frac{4xsinx}{1+cos^2x}dx$

๖๑. $\int_1^3 |x-1|+|x-2|+|x-3|dx$

๖๒. $\int_{\frac{\pi}{6}}^{\frac{\pi}{3}} \frac{dx}{1+\sqrt{tanx}}dx$

๖๓. $\int_{-\frac{\pi}{4}}^{\frac{\pi}{4}} sin^3xdx$

๖๔. $\int_0^{\pi} \frac{xsinx}{1+cos^2x}dx$

๖๕. $\int_{-a}^{a} \sqrt{\frac{a-x}{a+x}}dx$

๖๖. $\int_0^{\frac{\pi}{2}} e^x(sinx-cosx)dx$

๖๗. $\int_0^3 \frac{1}{9+x^2}dx$

๖๘. $\int_e^{e^2} \frac{1}{xlnx}dx$

๖๙. $\int_2^4 \frac{x}{x^2+1}dx$

๗๐. $\int_0^{\frac{\pi}{4}} ln(1+tanx)dx$

๗๑. $\int_0^{2\pi} \frac{1}{e^{sinx}}dx$

๗๒. $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} cos2xln(sinx)dx$

๗๓. $\int_0^2 \sqrt{4-x^2}dx$

๗๔. $\int_0^1 \frac{2x}{1+x^2}dx$

๗๕. $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} sin^5xdx$

๗๖. $\int_0^{\frac{1}{\sqrt{2}}} \frac{1}{\sqrt{1-x^2}}dx$

๗๗. $\int_0^1 \frac{1}{1+x^2}dx$

๗๘. $\int_0^{\frac{\pi}{2}} \frac{2^{sinx}}{2^{sinx}+2^{cosx}}dx$

๗๙. $\int_0^{\frac{a}{2}} |xcos(\pi x)|dx$

๘๐. $\int_{-\pi}^{\pi} (cosax-sinbx)^2 dx$

๘๑. $\int_0^{\frac{\pi}{2}} \frac{\sqrt{sinx}}{\sqrt{sinx}+\sqrt{cosx}}dx$

๘๒. $\int_{-1}^2 \left|x^3-x\right| dx$

๘๓. $\int_1^4 \{|x-1|+|x-2|+|x-4|\} dx$

๘๔. $\int_0^{\pi} e^{2x}sin\left(\frac{\pi}{4}+x\right) dx$

๘๕. $\int_{-2}^2 \frac{x^2}{1+5^x}dx$

๘๖. $\int_0^{\pi/2} \sin^2 x dx$

๘๗. $\int_0^{\pi/4} \frac{dx}{1+\sin x}$

๘๘. $\int_0^2 \frac{dx}{\sqrt{x+2}+\sqrt{x}}$

๘๙. $\int_0^{\pi/2} \frac{\sin x}{\sin x - \cos x} dx$

๙๐. $\int_1^2 \frac{dx}{x\left(1+x^4\right)}$

๙๑. $\int_0^1 \frac{dx}{x^2+x+1}$

๙๒. $\int_0^1 xe^x dx$

๙๓. $\int_0^{\pi/2} \frac{dx}{\sin x + \cos x}$

๙๔. $\int_0^{\pi/2} \frac{dx}{\left(3\sin^2 x + 4\cos^2 x\right)}$

๙๕. $\int_0^1 (1-x)x^n dx$

๙๖. $\int_0^{\infty} \frac{dx}{\left(x^2+a^2\right)\left(x^2+b^2\right)}$

๙๗. $\int_0^1 x(1-x)^5 dx$

๙๘. $\int_0^{\pi/2} \left(\frac{\sin^2 x}{\sin^4 x + \cos^4 x}\right) dx$

๙๙. $\int_1^2 \frac{dx}{x\left(x^3+1\right)}$

๑๐๐. $\int_2^4 \frac{x}{\sqrt{x}-2} dx$

๑๐๑. $\int_0^1 x(1-x)^{2012} dx$

๑๐๒. $\int_1^2 \frac{dx}{x\left(x^3+1\right)}$

๑๐๓. $\int_0^{\pi/2} \frac{dx}{(2+\cos x)}$

๑๐๔. $\int_0^{\pi/2} \frac{dx}{\left(2\sin^2 x + \cos^2 x\right)}$

๑๐๕. $\int_0^{\pi/2} \left(\frac{\cos x}{6 - 5\sin x + \sin^2 x}\right) dx$

๑๐๖. $\int_0^{\pi/2} \left(\frac{\sin^2 x}{\sin^4 x + \cos^4 x}\right) dx$

๑๐๗. $\int_0^{\pi/4} \left(\frac{\sin x + \cos x}{16 + \sin^2 x}\right) dx$

๑๐๘. $\int_0^{\pi/2} \left(\frac{1}{\sqrt{\cos x} + \sqrt{\sin x}}\right)^4 dx$

๑๐๙. $\int_0^2 \frac{dx}{\sqrt{x+1}+\sqrt{(x+1)^3}}$

๑๑๐. $\int_0^{\pi/2} \left(\frac{\cos^2 x}{4\sin^2 x + \cos^2 x}\right) dx$

๑๑๑. $\int_1^2 \frac{dx}{(2x+1)\sqrt{x^2+x}}$

๑๑๒. $\int_0^4 \frac{dx}{x+\sqrt{x}}$

๑๑๓. $\int_0^1 \frac{x\tan^{-1}}{(1+x^2)^{3/2}} dx$

๑๑๔. $\int_0^{\frac{\pi}{2}} \frac{\cos\theta}{(1+\sin\theta)(2+\sin\theta)} d\theta$

๑๒๕. $\int_0^{\frac{\pi}{2}} (\sqrt{\tan x} + \sqrt{\cot x})dx$

๑๒๖. $\int_0^{\frac{\pi}{2}} \frac{dx}{4\sin^2 x + 5\cos^2 x}$

๑๒๗. $\int_0^{\frac{\pi}{4}} \left(\frac{\sin x + \cos x}{9 + 16\sin^2 x}\right) dx$

๑๒๘. $\int_0^{\frac{\pi}{2}} \left(\frac{\sin^2 x}{\sin^4 x + \cos^4 x}\right) dx$

๑๒๙. $\int_0^{\pi/2} \frac{\sqrt{sinx}}{\sqrt{sinx} + \sqrt{cosx}} dx$

๑๓๐. $\int_0^{\pi/2} \frac{sin^{3/2}x}{sin^{3/2}x + cos^{3/2}x} dx$

๑๓๑. $\int_0^{\pi/2} ln(tanx)dx$

๑๓๒. $\int_0^{\pi/4} ln\left(1 + tanx\right) dx$

๑๓๓. $\int_0^{\pi/2} ln\left(\frac{4 + 3sinx}{4 + 3cosx}\right) dx$

๑๓๔. $\int_0^{\pi/2} \frac{sinx - cosx}{1 + sinxcosx} dx$

๑๓๕. $\int_0^1 x(1-x)^n dx$

๑๓๖. $\int_0^{\pi} \frac{xsinx}{1 + cos^2 x} dx$

๑๓๗. $\int_0^{\pi} \frac{x}{1 + sinx} dx$

๑๓๘. $\int_0^{\pi/2} \frac{xsinxcosx}{sin^4 x + cos^4 x} dx$

๑๓๙. $\int_0^1 tan^{-1}(1 - x + x^2)dx$

๑๔๐. $\int_0^{\pi/2} \frac{1}{\sqrt{tanx} - \sqrt{cotx}} dx$

๑๔๑. $\int_{1/2}^{2} \frac{1}{x} cosec^{101}\left(x - \frac{1}{x}\right) dx$

๑๔๒. $\int_0^{\pi} xln(sinx)dx$

๑๔๓. $\int_0^{2\pi} \frac{xsin^{2n}x}{sin^{2n}x + cos^{2n}x} dx, n > 0$

๑๔๔. $\int_0^{/2} \frac{cosx}{1 + sinx + cosx} dx$

๑๔๕. $\int_a^b \frac{f(x)}{f(x) + f(a + b - x)} dx$

๑๔๖. $\int_{-2}^{2} \frac{1}{1 + 3^x} dx$

๑๔๗. $\int_{\pi/6}^{5\pi/6} \frac{1}{1 + e^{tanx}} dx$

๑๔๘. $\int_{-\pi}^{\pi} \frac{cos^2 x}{1 + a^x} dx$

๑๔๙. $\int_{-1/\sqrt{3}}^{1/\sqrt{3}} \left[\frac{x^4}{1 - x^4} cos^{-1}\left(\frac{2x}{1 + x^2}\right)\right] dx$

๑๕๐. $\int_{\sqrt{ln3}}^{\sqrt{ln2}} \frac{xsin(x^2)}{sinx^2 + sin[ln(6 - x^2)]} dx$

๑๕๑. $\int_0^1 \frac{x^4(1-x)^4}{1 + x^2} dx$

๑๕๒. $\int_{3\pi/4}^{\pi/4} \frac{1}{1 + cosx} dx$

๑๕๓. $\int_{-\pi/2}^{\pi/2} \frac{cosx}{1 + e^x} dx$

๑๕๔. $\int_{-\pi/2}^{\pi/2} \frac{1}{e^{sinx} + 1} dx$

១៤៥. $\int_{50}^{100} \frac{lnx}{lnx+ln(150-x)}dx$

១៤៦. $\int_{0}^{4\pi} sin^{2013}xdx$

១៤៧. $\int_{0}^{2\pi} cos^{2013}xdx$

១៤៨. $\int_{-\pi/2}^{\pi/2} sin^{5}xdx$

១៤៩. $\int_{-\pi/4}^{\pi/4} x^3tan^4xdx$

១៥០. $\int_{-2}^{2} ln\left(\frac{2-sinx}{2+sinx}\right)dx$

១៥១. $\int_{0}^{2} x(x-1)(x-2)dx$

១៥២. $\int_{-2010}^{2010} \frac{sin^{2013}x}{x^{2014}-x^{2012}x+1}dx$

១៥៣. $\int_{-\pi}^{\pi} \frac{2x(1+sinx)}{1+cos^2x}dx$

១៥៤. $\int_{-\pi/3}^{\pi/3} \frac{\pi+4x^3}{2-cos\left(|x|+\frac{\pi}{3}\right)}dx$

១៥៥. $\int_{-1}^{1} ln\left(\frac{2-x}{2+x}\right)sin^2xdx$

១៥៦. $\int_{log3}^{log(1/3)} tan\left(\frac{e^x-1}{e^x+1}\right)dx$

១៥៧. $\int_{-1/2}^{1/2} \left[cosx\cdot ln\left(\frac{1-x}{1+x}\right)\right]dx$

១៥៨. $\int_{-1}^{1} sin^{10}xcos^{11}xdx$

១៥៩. $\int_{0}^{\pi} \frac{xsin2x\cdot sin\left(\frac{\pi}{2}cosx\right)}{2x-\pi}dx$

១៦០. $\int_{0}^{\pi} \left(sin^3x+cos^5x+tan^7x\right)dx$

១៦១. $\int_{0}^{\pi/2} sin2xln(tanx)dx$

១៦២. $\int_{0}^{\pi} \frac{x}{1+cos\alpha sinx}dx$

១៦៣. $\int_{-\pi/4}^{\pi/4} ln\left(sinx+cosx\right)dx$

១៦៤. $\int_{0}^{\pi} \frac{1}{3sin^2x+4cos^2x}dx$

១៦៥. $\int_{0}^{\infty} ln\left(\frac{1}{x}+x\right)\cdot\frac{dx}{1+x^2}$

១៦៦. $\int_{0}^{\pi/4} ln(1+tanx)dx$

១៦៧. $\int_{0}^{1} \frac{lnx}{\sqrt{1-x^2}}dx$

១៦៨. $\int_{0}^{\pi} ln(1-cosx)dx$

១៦៩. $\int_{0}^{400\pi} \sqrt{1-cos^2x}dx$

១៧០. $\int_{0}^{200\pi} \frac{1}{1+5^{sinx}}dx$

១៧១. $\int_{-\pi/2}^{\pi/2} sin\left[ln\left(x+\sqrt{x^2+1}\right)\right]dx$

១៧២. $\int_{0}^{\pi} |sinx+cosx|dx$

១៧៣. $\int_{-4}^{-5} e^{(x+5)^2}dx+\int_{1/3}^{2/3} e^{9(x-2/3)^2}dx$

១៧៤. $\int_0^{100\pi} |sinx| + |cosx| dx$

១៧៥. $\int_0^{100\pi} |sinx| - |cosx| dx$

១៧៦. $\int_{-503\pi}^{503\pi} |cosx| dx$

១៧៧. $\int_0^{50\pi/3} \sqrt{\frac{1-cos2x}{2}} dx$

១៧៨. $\int_0^{2014\pi} \sqrt{1-cos2x} dx$

១៧៩. $\int_0^{10\pi} |sinx| dx$

១៨០. $\int_1^{e^{37}} \frac{\pi sin(\pi lnx)}{x} dx$

១៨១. $\int_0^{32\pi/3} \sqrt{1+cos2x} dx$

១៨២. $\int_0^{10\pi/3} |sinx| dx$

១៨៣. $\int_{-\pi}^{199\pi} \sqrt{\frac{1-cos2x}{2}} dx$

១៨៤. $\int_{10\pi+\pi/3}^{10\pi+\pi/6} sinx + cosx dx$

១៨៥. $\int_0^{\pi} sin^{100}x cos^{99}x dx$

១៨៦. $\int_0^{\pi} sin^{2014}cos^{2013} dx$

១៨៧. $\int_0^1 |cos(\pi x)| dx$

១៨៨. $\int_0^1 |sin(2\pi x)| dx$

១៨៩. $\int_{-3/4}^{3/2} |xcos(\pi x)| dx$

១៩០. $\int_{-\pi/12}^{-5\pi/12} \frac{sin^{2014}x}{sin^{2014}x + cos^{2014}x} dx$

១៩១. $\int_{-\pi/3}^{\pi/6} \frac{sin^{2n}x}{cos^{2n}x + sin^{2n}x} dx$

១៩២. $\int_{-\pi/6}^{-\pi/3} \frac{sin^3x + cos^3x}{sin^{10}x + cos^{10}x} dx$

១៩៣. $\int_0^{\pi} \frac{|sin(2x)|}{|sinx| + |cosx|} dx$

១៩៤. $\int_0^{\infty} \frac{tan^{-1}(ax) - tan^{-1}(x)}{x} dx$

១៩៥. $\int_0^{\pi/2} \frac{ln\left(1 + xsin^2\theta\right)}{sin^2\theta} dx$

១៩៦. $\int_0^1 \frac{x^{cos\alpha} - 1}{log_e x} dx$

១៩៧. $\int_0^{\pi} ln(1 + bcosx) dx$

១៩៨. $\int_0^1 logx dx$

១៩៩. $\int_0^{\infty} e^{-x}x^6 dx$

២០០. $\int_0^{\infty} e^{-x}x^3 dx$

២០១. $\int_0^1 \left[log\left(\frac{1}{x}\right)\right]^{n-1} dx$

២០២. $\int_0^1 x^4\sqrt{1-x^2} dx$

២០៣. $\int_0^{\pi/2} sin^8x \cdot cos^4x dx$

๒๐๔. $\int_0^1 x^6\sqrt{1-x^2}dx$

๒๐๕. $\int_0^{\pi/2} sin^4xcos^6xdx$

๒๐๖. $\int_0^1 x^{10}\sqrt{1-x^2}dx$

๒๐๗. $\int_0^{\pi/2} sin^7xcos^5xdx$

๒๐๘. $\int_0^{\pi/2} sin^{10}xdx$

๒๐๙. $\int_0^{\pi/2} cos^7xdx$

๒๑๐. $\int_0^{\pi/4} 8cos^4x\cdot sin^4xdx$

๒๑๑. $\int_0^{\pi/2} sin^6x\cdot cos^5xdx$

๒๑๒. $\int_0^{\pi/2} sin^5xcos^3xdx$

๒๑๓. $\int_0^{\pi/2} sin^6xcos^4xdx$

๒๑๔. $\int_0^{\pi/2} sin^7xcosxdx$

๒๑๕. $\int_0^{\pi/2} sin^7xcos^5xdx$

๒๑๖. $\int_0^{\pi/2} sin^{11}xdx$

๒๑๗. $\int_0^{\pi/2} cos^8xdx$

๒๑๘. $\int_0^{\pi} log(1+cosx)dx$

๒๑๙. $\int_0^1 \frac{sin^{-1}x}{sin^{-1}x+cos^{-1}x}dx$

๒๒๐. $\int_0^{\pi/2} \frac{asinx+bcosx}{sinx+cosx}dx$

๒๒๑. $\int_{-\pi}^{\pi} (1-x^2)sinxcos^2xdx$

๒๒๒. $\int_{\pi}^{\pi/2} \frac{sin2x}{sin^4x+cos^4x}dx$

๒๒๓. $\int_0^{\pi/2} sin^{-1}(cosx)+cos^{-1}(sinx)dx$

๒๒๔. $\int_{cos(cos^{-1}\alpha)}^{sin(sin^{-1}\beta)} \left|\frac{cos(cos^{-1}x)}{sin(sin^{-1}x)}\right| dx$

๒๒๕. $\int_0^{\pi/2} \frac{8+7cosx}{(7+8cosx)^2}dx$

๒๒๖. $\int_0^4 \frac{(y^2-4y+5)sin(y-2)}{2y^2-8y+1}dy$

๒๒๗. $\int_{-1}^1 \frac{sin\alpha}{x^2-2xcos\alpha+1}dx$

๒๒๘. $\int_0^1 \frac{x^3sin^{-1}x}{\sqrt{1-x^2}}dx$

๒๒๙. $\int_0^1 \left(\frac{1-x^2}{1+x^2}\cdot\frac{1}{\sqrt{1+x^4}}\right)dx$

๒๓๐. $\int_{-3\pi/4}^{5\pi/4} \left[\frac{sinx+cosx}{e^{(x-\pi/4)}+1}\right]dx$

๒๓๑. $\int_0^{\pi} \frac{sin(n+1/2)x}{sin(x/2)}dx$

๒๓๒. $\int_0^{\pi/2} \frac{sin(5x)}{sinx}dx$

๒๓๓. $\int_0^{\pi/2} ln\left(a^2cos^2x+b^2sin^2x\right)dx$

២៣៤. $\int_0^{\infty} \frac{lnx}{x^2+2x+4}dx$

២៣៥. $\int_0^{1} \frac{lnx}{1+x}dx$

២៣៦. $\int_0^{\pi} \frac{ln(1+x^4)}{x}dx$

២៣៧. $\int_0^{\pi} \frac{sin\theta}{a^2cos^2\theta+b^2sin^2\theta}dx$

២៣៨. $\int_{\alpha}^{\beta} \sqrt{\frac{x-\alpha}{\beta-x}}dx$

២៣៩. $\int_0^{\pi/2} \frac{cosx}{acosx+bsinx}dx$

២៤០. $\int_0^{\pi/2} \frac{sin^6x}{sinx+cosx}dx$

២៤១. $\int_0^{\infty} \frac{(x-1)^4}{x^8+x^{10}}dx$

២៤២. $\int_0^{\pi} \frac{x}{1+cos^2x}dx$

២៤៣. $\int_0^{\pi/6} \frac{\sqrt{3cos(2x)-1}}{cosx}dx$

២៤៤. $\int_{10}^{-10} x\left(\frac{x}{e^x-1}+\frac{x}{2}+1\right)dx$

២៤៥. $\int_0^{4\pi} tan^{2013}xdx$

២៤៦. $\int_0^{1} \frac{ln(2+2x)}{1+x^2}dx$

២៤៧. $\int_0^{\pi} ln(sinx)dx$

២៤៨. $\int_0^{\pi} ln(cosx)dx$

២៤៩. $\int_0^{\pi/2} \left(\sqrt{sinx}+\sqrt{cosx}\right)^{-4}dx$

២៥០. $\int_0^{2} ln\left(\frac{x}{2-x}\right)dx$

២៥១. $\int_0^{2} x(x+1)(2-x)(3-x)dx$

២៥២. $\int_0^{4} 2x^3-12x^2+78x-124dx$

២៥៣. $\int_0^{2} \frac{e^{2-x}-e^x}{e^{2-x}+e^x}dx$

២៥៤. $\int_0^{a} \frac{f(x)}{f(x)+f(a-x)}dx$

២៥៥. $\int_0^{1} \frac{ln(2+4x+2x^2)}{1+x^2}dx$

២៥៦. $\int_0^{\pi/2} \frac{xsinxcosx}{sin^4x+cos^4x}dx$

២៥៧. $\int_0^{\pi} \frac{xsin(2x)sin\left(\frac{x}{2}cosx\right)}{2x-\pi}dx$

២៥៨. $\int_3^{5} \frac{x^2}{x^2-4}dx$

២៥៩. $\int_{-\pi}^{\pi} (1-x^2)sinxcos^2xdx$

២៦០. $\int_{-1}^{1} |1-x|dx$

២៦១. $\int_0^{1} |sin(2\pi x)|dx$

២៦២. $\int_2^{3} \frac{2x^5+x^4-2x^3+2x^2+1}{(x^2+1)(x^4-1)}dx$

២៦៣. $\int_0^{1} \frac{1}{(5+2x-2x^2)\left[1+e^{(2-4x)}\right]}dx$

២៦៤. $\int_{-1}^{1} \frac{sinx - x^2}{3 - |x|} dx$

២៦៥. $\int_{2}^{3} \frac{\sqrt{x}}{\sqrt{5-x} + \sqrt{x}} dx$

២៦៦. $\int_{-\pi}^{\pi} \frac{2x\,(1 + sinx)}{1 + cos^2 x} dx$

២៦៧. $\int_{1}^{e^{37}} \frac{\pi sin(\pi lnx)}{x} dx$

២៦៨. $\int_{\pi/4}^{3\pi/4} \frac{1}{1 + cosx} dx$

២៦៩. $\int_{0}^{\pi} \frac{e^{cosx}}{e^{cosx} + e^{-cosx}} dx$

២៧០. $\int_{e^{-1}}^{e^2} \left| \frac{log_e x}{x} \right| dx$

២៧១. $\int_{-\pi/3}^{\pi/3} \frac{\pi + 4x^3}{2 - cos\,(|x| + \pi/3)} dx$

២៧២. $\int_{0}^{1} \frac{x^4(1-x)^4}{1 - x^2} dx$

២៧៣. $\frac{\pi^2}{ln3} \int_{7/6}^{5/6} sec(\pi x) dx$

២៧៤. $\int_{-\pi/2}^{\pi/2} \frac{x^2 cosx}{1 + e^x} dx$

២៧៥. $\int_{0}^{\pi/2} e^x (sinx - cosx) dx$

២៧៦. $\int_{\pi/4}^{3\pi/4} \frac{\varphi}{1 + sin\varphi} d\varphi$

២៧៧. $\frac{\int_{-1/2}^{1/2} cos(2x) ln\left(\frac{1+x}{1-x}\right) dx}{\int_{0}^{1/2} cos(2x) ln\left(\frac{1+x}{1-x}\right) dx}$

២៧៨. $\int_{\sqrt{ln2}}^{\sqrt{ln(1/2)}} x^3 \left(\frac{x^2}{e^{x^2}} + \frac{x^2}{2} + 1 \right) dx$

២៧៩. $\int_{0}^{\pi/2} \frac{\sqrt{sin^3 x}}{\sqrt{sin^3 x} + \sqrt{cos^3 x}} dx$

២៨០. $\int_{0}^{\pi/2} \frac{\varphi(x)}{\varphi(x) + \varphi\,(\pi/2 - x)} dx$

២៨១. $\int_{\pi/6}^{\pi/3} \frac{sinx + cosx}{\sqrt{sin2x}} dx$

២៨២. $\int_{-1}^{3/2} |xsin(\pi x)| dx$

២៨៣. $\int_{\pi/6}^{\pi/3} \frac{1}{1 + \sqrt{tanx}} dx$

២៨៤. $\int_{\pi/6}^{\pi/3} \frac{1}{1 + \sqrt{cotx}} dx$

២៨៥. $\int_{-\pi/2}^{\pi/2} [sin(sinx) + xcos(sinx)] dx$

២៨៦. $\int_{0}^{\pi} e^{|cosx|} \left[2sin\left(\frac{1}{2}cosx\right) + 3cos\left(\frac{1}{2}cosx\right) \right] sinx dx$

២៨៧. $\int_{-2}^{0} [(x^3 + 3x^2 + 3) + (x+1)cos(x+1)] dx$

២៨៨. $\int_{-\pi/2}^{\pi/2} sin\left(\frac{2^x - 1}{2^x + 1}\right) + x\left(\frac{x}{2012^x - 1} + \frac{x}{2}\right) dx$

๒๘๙. $\int_0^4 (|x^2+4x|+|x^2-16|)-(|x^2-8x|+|x^2-12x+32|)dx$

๒๙๐. $\int_{-10}^{10}\left[\frac{sin\left(\sqrt{x^2+x+1}-\sqrt{x^2-x+1}\right)}{ln\left(x+\sqrt{x^2+1}\right)\cdot\frac{10x-1}{10x+1}}\right]dx$

๒๙๑. $\int_{49}^{51}(x-2)(x-4)(x-6)\cdots+(x-48)(x-50)\cdots(x-96)(x-98)dx$

๒๙๒. $\int_0^4 (x-1)(x-2)(x-3)(x-4)(x-5)dx$

๒๙๓. $\int_{-3}^{-1}[(x^3+6x^2+12x+10)+(x+2)cos(x+2)]dx$

๒๙๔. $\int_{-2}^{0}[(x^3+3x^2+3x+4)+(x+1)^2sin(x+1)]dx$

๒๙๕. $\int_{-\sqrt{3}}^{\sqrt{3}}\frac{x^4+x^3+2x^2+xtan^3x+tan^{-1}x+1}{x^6+3x^4+3x^2+1}dx$

๒๙๖. $\int_{-1/\sqrt{3}}^{1/\sqrt{3}}\left[\frac{cos^{-1}\left(\frac{2x}{1+x^2}+tan^{-1}\left(\frac{2x}{1-x^2}\right)\right)}{e^x+1}\right]dx$

๒๙๗. $\int_{-\pi/3}^{0}cot^{-1}\left(\frac{2}{2cosx-1}\right)+cot^{-1}\left(cosx-\frac{1}{2}\right)dx$

๒๙๘. $\int_0^{\pi/2}ln\left(\frac{1+asinx}{1-asinx}\right)\frac{dx}{sinx},(|a|<1)$

๒๙๙. $\int_{-1/2}^{1/2}\left(\sqrt{\left(\frac{x+1}{x-1}\right)^2+\left(\frac{x-1}{x+1}\right)^2-2}\right)dx$

๓๐๐. $\int_{-1}^{1}tan^{-1}\left(\frac{x}{1+x^2}\right)+tan^{-1}\left(\frac{1+x^2}{x}\right)dx$

๓๐๑. $\int_{-10}^{10}tan^{2013}+\frac{2013\sqrt{x}}{1+x^{2014}}+1007dx$

៣០២. $\int_{-2}^{2} \sqrt{2012+2013x+2014x^2} - \sqrt{2012-2013x+2014x^2}dx$

៣០៣. បើ $I_n = \int_0^{\pi/2} \tan^n x dx$ បង្ហាញថា $I_n + I_{n-2} = \frac{1}{n-1}$

៣០៤. បង្ហាញថា $\int_0^{\pi} \frac{sin(nx)}{sinx} = \begin{cases} 0 & \text{បើ } n \text{ គូ} \\ \pi & \text{បើ } n \text{ សេស} \end{cases}$

៣០៥. $\int_{2010}^{2014} (x-2010)(x-2011)(x-2013)(x-2014)dx$

៣០៦. $\int_{-\pi/4}^{\pi/4} \frac{x^{2013} - 3x^{2011} + 5x^{2009} - 7x^{2007} + 1007}{cos^2 x} dx$

៣០៧. $\int_{-2}^{0} [x^3 + 3x^2 + 3x + 3 + (x+1)cos(x+1)]dx$

៣០៨. $\int_1^5 (x-1)(x-2)(x-3)(x-4)(x-5)dx$

៣០៩. តាង $f'(x) = \frac{2x^3}{2+sin^4(\pi x)}$ ចំពោះគ្រប់ $x \in \mathbb{R}$ និង $f\left(\frac{1}{2}\right) = 0$ ។

បើ $m \le \int_{1/2}^{2} f(x)dx \le M$ នោះចូររកតម្លៃ m និង M ។

៣១០. តាង f ជាអនុគមន៍កំណត់លើ $[-\pi, \pi]$ កំណត់ដោយ $f(0) = 9$ និង

$f(x) = \frac{sin\left(\frac{9x}{2}\right)}{sin\left(\frac{x}{2}\right)}$ ចំពោះ $x \neq 0$។ ចូររកតម្លៃនៃ $\frac{2}{\pi}\int_{-\pi}^{\pi} f(x)dx$ ។

៣១១. តាង $f : [1, \infty) \to [2, \infty)$ ជាអនុគមន៍មានឌីផេរ៉ង់ស្យែលដែល $f(1) = 2$

បើ $6\int_1^x f(t)dt = 3xf(x) - x^3$ ចំពោះគ្រប់ $x \ge 1$ នោះរកតម្លៃនៃ $f(2)$ ។

៣១២. ចូររកតម្លៃនៃ $f\left(\frac{\pi}{6}\right)$ បើ $\int_a^b f(x) - 3xdx = a^2 - b^2$ ។

៣១៣. រកតម្លៃនៃ $\int_0^1 4x^3 \left[\frac{d^2}{dx^2}(1-x^2)^5\right] dx$

៣១៤. តាង $f(x)=7tan^8x+7tan^6x-3tan^4x-3tan^2x$ ចំពោះគ្រប់ $x\in\left(-\frac{\pi}{2},\frac{\pi}{2}\right)$ ។ ចូរកតម្លៃនៃ

ក $\int_0^{\pi/4} f(x)dx$ ខ $\int_0^{\pi/4} xf(x)dx$

៣១៥. ចូរគណនាតម្លៃនៃ $5050\times\left(\frac{\int_0^1(1-x^{50})^{100}dx}{\int_0^1(1-x^{50})^{101}dx}\right)$

៣១៦. តាង $f(x)$ ជាអនុគមន៍គូ។

បង្ហាញថា $\int_0^{\pi/2} f(sin2x)sinxdx=\sqrt{2}\int_0^{\pi/2} f(cos2x)cosxdx$

៣១៧. បើ $f(x)$ មានឌីផេរ៉ង់ស្យែល និង $\int_0^{t^2} xf(x)dx=\frac{2}{5}t^5$ រកតម្លៃ $f\left(\frac{4}{45}\right)$ ។

៣១៨. តាង $f(x)$ ជាអនុគមន៍មានអឺផេរ៉ង់ស្យែលកំណត់ដោយ $f:[0,4]\to\mathbb{R}$

បង្ហាញថា

ក $8f'(a)f(b)=[f(4)]^2-[f(0)]^2$ ពេល $a,b\in(0,4)$

ខ $\int_0^4 f(x)dx=2[\alpha f(\alpha^2)+\beta f(\beta^2)]$ ដែល $0<\alpha,\beta<2$

៣១៩. គណនា $y'(\pi)$បើ $y(x)=\int_{\pi^2/16}^{x^2}\left[\frac{cosxcos\left(\sqrt{\theta}\right)}{1+sin^2\left(\sqrt{\theta}\right)}\right]d\theta$

៣២០. រក $f\left(\frac{1}{\sqrt{3}}\right)$ បើ $\int_{sinx}^1 t^2f(t)dt=1-sinx$ ។

៣២១. តាង $\frac{d}{dx}[F(x)]=\frac{e^{sinx}}{x},x>0$ បើ $\int_1^4\frac{2e^{sinx^2}}{x}dx=F(k)-F(1)$

ចូររកតម្លៃ k ។

៣២២. រក $g(\pi+x)$ បើ $g(x)=\int_x^0 cos^4tdt$ ។

៣២៣. រកតម្លៃនៃ $f(1)$ បើ $\int_0^x f(t)dt = x + \int_x^1 tf(t)dt$ ។

៣២៤. បង្ហាញថា $\int_0^1 tan^{-1}\left(\frac{1}{1-x+x^2}\right)dx = 2\int_0^1 tan^{-1}xdx$

រួចគណនា $\int_0^1 tan^{-1}(1-x+x^2)dx$ ។

៣២៥. តាង $g(x) = \int_0^x f(t)dt$ ដែល $\frac{1}{2} \le f(t) \le 1$ ចំពោះ $t \in [0,1]$ និង $0 \le f(t) \le \frac{1}{2}$ ចំពោះ $t \in [1,2]$ នោះចូររក $g(2)$ ។

៣២៦. រកតម្លៃនៃ $\int_{-2}^3 f(x)dx$ បើ $f(x) = \begin{cases} e^{cosx}sinx & : |x| < 2 \\ 2 & : otherwise \end{cases}$ ។

៣២៧. ចំពោះ $x > 0$ តាង $f(x) = \int_0^x \frac{lnt}{1+t}dt$។រកអនុគមន៍ $f(x) + f\left(\frac{1}{x}\right)$ រួចបង្ហាញថា $f(e) + f\left(\frac{1}{e}\right) = \frac{1}{2}$ ។

៣២៨. តាង $f : (0,\infty) \to \mathbb{R}$ ហើយ $F(x) = \int_0^x f(t)dt$ និង $F(x^2) = x^2(x+1)$ នោះរកតម្លៃនៃ $f(4)$ ។

៣២៩. បង្ហាញថា $\int_0^{n\pi+V} |sinx|dx = 2n + 1 - cosV$ ដែល $n \in \mathbb{Z}^+$ និង $0 \le V \le \pi$ ។

៣៣០. រកតម្លៃ A និង B បើ $f(x) = Asin\left(\frac{\pi}{2}x\right) + B, f'\left(\frac{1}{2}\right) = 2\sqrt{2}$ និង $\int_0^1 f(x)dx = \frac{2A}{\pi}$ ។

៣៣១. តាង $U_n = \int_0^\pi \frac{1-cos(nx)}{1-cosx}dx$ ដែល n ជាចំនួនគត់វិជ្ជមាន។ បង្ហាញថា $U_{n+2} + U_n = 2U_{n+1}$ ។

៣៣២. តាង $f : \mathbb{R} \to \mathbb{R}$ និង $g : \mathbb{R} \to \mathbb{R}$ ជាអនុគមន៍ជាប់។

ចូររកតម្លៃនៃ $\int_{-\pi/2}^{\pi/2}[(f(x)+f(-x))\,(g(-x)-g(-x))]dx$

៣៣៣. ចំពោះចំនួនគត់វិជ្ជមាន k

បង្ហាញថា $\frac{sin(2kx)}{sinx}=2[cosx+cos3x+\cdots+cos(2k-1)x]$

រួចបង្ហាញថា $\int_0^{\pi/2}sin(2kx)cotxdx=\frac{\pi}{2}$ ។

៣៣៤. រកតម្លៃនៃ $\int_0^1\left\{[f(x)+f(1-x)]\,[g(x)-g(1-x)]\right\}dx$

៣៣៥. តាង $I_1=\int_0^2 xln\,[x(2-x)]\,dx$ និង $I_2=\int_0^2 ln\,[x(2-x)]\,dx$ ។

ចូរគណនាតម្លៃនៃ $\frac{I_1}{I_2}$ ។

៣៣៦. រកតម្លៃនៃ $B-A$ បើ $\int_0^{\pi/2}sin^{10}xdx$ ។

៣៣៧. រកតម្លៃនៃ $L+M+P-Q$ បើ $\int_0^{\pi/2}cos^8xdx=\frac{(LM)\pi}{PQ}$ ។

៣៣៨. រកតម្លៃ I_1-I_2+5 បើ $I_1=\int_0^{\pi/2}ln(sinx)dx$ និង $I_2=\int_0^{\pi/2}ln(cosx)dx$

៣៣៩. រកតម្លៃនៃ $A+B+3$ បើ $L=\int_0^1\frac{ln(1+x)}{1+x^2}dx$ និង

$M=\int_0^{\pi/4}ln(1+tan\theta)d\theta$ ដែល $L+M=\frac{\pi}{A}lnB$ ។

៣៤០. រកតម្លៃនៃ $\int_{1/2}^0 f(x)dx,(a\neq b)$ បើ $af(x)+b(-x)=\frac{1}{x}=sin\left(x-\frac{1}{x}\right)$

៣៤១. បើ $I_n=\int_0^\infty e^{-x}x^{n-1}lnxdx$ បង្ហាញថា $I_{n+2}-(2n+1)I_{n+1}+n^2I_n=0$ ។

៣៤២. សន្មតថា $\int_0^\pi ln(sin\theta)d\theta=-\pi ln2$ បង្ហាញថា

$\int_0^\pi\theta^3ln(sin\theta)d\theta=\frac{3\pi}{2}\int_0^\pi\theta^2ln(\sqrt{2}sin\theta)d\theta$ ។

៣៨៣. បើ $I_n = \int_0^{\pi/4} tan^n x dx$ បង្ហាញថា $\frac{1}{I_2+I_4}, \frac{1}{I_3+I_5}, \frac{1}{I_4+I_6}, \frac{1}{I_5+I_7}$ ជាស្ទីតនព្វន្ត ។

៣៨៤. តាង $I = \int_0^{\infty} e^{-x} x^{3/2} dx$ ដែល $I = \frac{3}{L} \cdot (\pi) \frac{M}{N}$ ចូររកតម្លៃនៃ $L+M+N$ ។

៣៨៥. តាង $L = \int_{-2}^{3} |x-1|+1 dx$ និង $N = \int_0^4 |x-2| dx$ រកតម្លៃនៃ $\frac{2}{3}(L-M)$ ។

៣៨៦. រកតម្លៃនៃ $m+n$ បើ $\int_{-1}^{1} x^2 d(lnx) = \frac{e^m - 1}{2e^n}, m, n \in \mathbb{N}$ ។

៣៨៧. បង្ហាញថា $8m = n$ បើ $m = \int_0^1 \frac{ln(1+x)}{1+x^2} dx$ និង $n = \int_0^{\infty} \frac{ln(1+x^2)}{1+x^2} dx$

៣៨៨. រក $\frac{I_1}{I_2}$ បើ $\int_0^{\pi/2} \frac{x}{sinx} dx$ និង $I_2 = \int_0^1 \frac{tan^{-1}x}{x} dx$ ។

៣៨៩. រក $\frac{I_1}{I_2}$ បើ $I_1 = \int_0^1 \frac{e^x}{x+1} dx$ និង $I_2 = \int_0^1 \frac{x^2}{e^{x^3}(2-x^3)} dx$ ។

៣៩០. បង្ហាញថា $\frac{m}{n} = 2^{100}$ បើ $m = \int_0^1 x^{50}(2-x)^{50} dx$ និង $n = \int_0^1 x^{50}(1-x)^{50} dx$ ។

៣៩១. រកតម្លៃនៃ $\int_0^{\infty} \frac{sin^3 x}{x} dx$ បើ $\int_0^{\infty} \frac{sinx}{x} dx = \frac{\pi}{2}$ ។

៣៩២. បង្ហាញថា $A+B = \frac{1}{\pi+2} + \frac{1}{2}$ បើ $A = \int_0^{\pi} \frac{cosx}{(x+2)^2} dx$ និង $B = \int_0^{\pi/2} \frac{sin2x}{x+1} dx$ ។

៣៩៣. បើ $\int_0^{\infty} \frac{x^2}{(x^2+a^2)(x^2+b^2)(x^2+c^2)} dx = \frac{\pi}{2(a+b)(b+c)(c+a)}$

រកតម្លៃនៃ $\int_0^{\infty} \frac{dx}{(x^2+4)(x^2+9)}dx$ ។

៣៥៤. បើ $f(x+y)=f(x)-f(y)$ ចំពោះគ្រប់ x និង y ហើយ

$a=\int_1^3 (x-1)^2 f(x-1)dx$ និង $b=\int_{-3}^{1} (x+1)^2 f(x+1)dx$ ។

ចូរគណនាតម្លៃនៃ $2a-b+4$ ។

៣៥៥. រកតម្លៃ a បើ $\int_0^{\pi/2} \frac{\left(x-\frac{\pi}{4}\right)^2 sinx}{sinx+cosx}dx=\frac{1}{3}\left(\frac{\pi}{a}\right)^3$ ។

៣៥៦. បើ $\int_a^b f(t)g[h(t)]dt=\int_a^b f[h(t)]g(t)dt$ ដែល f,g,h ជាអនុគមន៍វិជ្ជ

មានជាប់លើ $[a,b]$ នោះរក $h(t)$ ។

៣៥៧. រកតម្លៃនៃ $\int_{1/e}^{tanx} \frac{t}{1+t^2dx}dt+\int_{1/e}^{cotx} \frac{1}{t(1+t^2)}dt$ ។

៣៥៨. រកតម្លៃនៃ $\int_0^{sin^2x} sin^{-1}(\sqrt{t})dt+\int_0^{cos^2x} cos^{-1}(t)dt$ ។

៣៥៩. តាង $f(x)$ ជាអនុគមន៍ជាប់ដែល $f(x)+f(2014-x)=0$

ចំពោះគ្រប់ $x\in[0,2014]$ ចូររក $\int_0^{2014} \frac{1}{1+5^{f(x)}}dx$ ។

៣៦០. រកតម្លៃនៃ $f(2\pi)$ បើ $f(x)=\int_0^x \frac{|siny|}{|siny|+|cosy|}dy$ ។

៣៦១. គណនា $\int_{-3}^{3} f(x)dx$ បើ $f(x)+f(y)=f(x+y)$ និង $\int_0^3 f(x)dx=\lambda$ ។

៣៦២. គណនា $\int_a^b xf(x)dx$ បើ $f(a+b-x)=f(x)$ ។

៣៦៣. តាង $f(x)=\frac{e^x}{1+e^x}$ បើ $I_1=\int_{f(-a)}^{f(a)} x[g(x(1-x))]dx$ និង

$I_2=\int_{f(-a)}^{f(a)} g[x(1-x)]dx$ នោះចូររក $\frac{I_1}{I_2}$ ។

៣៦៤. គណនា $F'(4)$ បើ $F(x)=\frac{1}{x^2}\int_4^x[4t^2-2F'(t)]dt$ ។

៣៦៥. តាង $\frac{d}{dx}[F(x)]=\frac{e^{sinx}}{x}, x>0$ បើ $\int_1^4\frac{3x^2e^{sinx^3}}{x}dx=F(k)-F(1)$ ចូររកតម្លៃ k ។

៣៦៦. គណនា $g(x+\pi)$ បើ $\int_0^{\pi}cos^4tdt$ ។

៣៦៧. រកតម្លៃ k បើ $\int_0^{\pi}xf(sinx)dx=k\int_0^{\pi/2}f(sinx)dx$ ។

៣៦៨. រកតម្លៃ k បើ $\int_0^{100\pi}\sqrt{1-cos2x}dx=200k$ ។

៣៦៩. ចំពោះគ្រប់ចំនួនគត់ n ដែល $\int_n^{n+1}f(x)dx=n^2$ នោះចូររកតម្លៃនៃ $\int_{-2}^4f(x)dx$ ។

៣៧០. គណនា $\int_2^{-1}[3-f(x)]dx$ បើ $\int_1^4f(x)=4$ និង $\int_2^4[3-f(x)]dx=7$ ។

៣៧១. គណនា $\int_1^2f(x)dx$ បើ $3f(x)+3f\left(\frac{1}{x}\right)+\frac{1}{x}-2, x\neq 0$ ។

៣៧២. បង្ហាញថា $4\leq\int_1^3\sqrt{x^2+3}dx\leq 4\sqrt{3}$ ។

៣៧៣. បង្ហាញថា $\frac{\pi}{4}\leq\int_0^1\frac{1}{\sqrt{4-x^2-x^3}}dx\leq\frac{\pi}{4\sqrt{2}}$ ។

៣៧៤. បង្ហាញថា $1\leq\int_0^1\sqrt{1+x^3}dx\leq\frac{5}{4}$ ។

៣៧៥. បង្ហាញថា $\frac{1}{17}\leq\int_1^2\frac{1}{1+x^4}dx\leq\frac{7}{24}$ ។

៣៧៦. បង្ហាញថា $I(b)=\int_0^1\frac{x^b-1}{lnx}dx=ln(b+1)$ ។

៣៧៧. តាង $f(x)$ ជាអនុគមន៍ជាប់ចំពោះគ្រប់ x ដែល

$[f(x)]^2 = \int_0^x f(t) \cdot \frac{2sec^2t}{4+tant}dt$ និង $f(0) = 0$ បង្ហាញថា $f\left(\frac{\pi}{4}\right) = ln\frac{5}{4}$

៣៧៨. បង្ហាញថា $f(x) = \int_0^{\pi/2} \frac{ln(1+xsin^2\theta)}{sin^2\theta}dx, x \geq 0 = \pi(\sqrt{1+x}-1)$ ។

៣៧៩. បង្ហាញថា $\int_0^1 \frac{x^{cos\alpha}-1}{log_e x}dx = log|1+cos\alpha|, [\alpha \neq (2n+1)\pi]$ ដែល α ជាប៉ារ៉ាម៉ែត្រ ។

៣៨០. បង្ហាញថា $\int_0^{\pi} ln(1+bcosx)dx = \pi ln\left(\frac{1+\sqrt{1-b^2}}{2}\right)$ ។

៣៨១. រកតម្លៃអតិបរមានៃ $\int_0^2 \sqrt{(1+x)(1+x^4)}dx$ ។

៣៨២. បង្ហាញថាតម្លៃអតិបរមានៃ $\int_0^1 \sqrt{(1+x)(1+x^3)}dx$ គឺ $\sqrt{\frac{15}{8}}$ ។

៣៨៣. បង្ហាញថាតម្លៃនៃ $\int_a^{a+\frac{\pi}{2}} sin^4x + cos^4xdx$ មិនអាស្រ័យនៃ a ។

៣៨៤. រកតម្លៃមធ្យមនៃ

ក $f(x) = \frac{1}{e^x+1}$ លើ $[0,2]$ ខ $f(x) = \frac{1}{x+x^2}$ លើ $[0,1]$

គ $f(x) = \sqrt[3]{x}$ លើ $[0,1]$ ឃ $f(x) = \frac{e^x}{q+e^x}$ លើ $[0,1]$

ង $f(x) = sin^3x$ លើ $[0,2\pi]$ ច $f(x) = sin^2x$ លើ $[0,\pi]$

៣៨៥. បង្ហាញថា $F(x) = \int_0^x ln\left(\frac{1-t}{1+t}\right)dt$ ជាអនុគមន៍គូ ។

៣៨៦. បង្ហាញថា $F(x) = \int_0^x \left(\frac{t}{e^t-1} + \frac{t}{2+t}\right)dt$ ជាអនុគមន៍សេស ។

៣៨៧. បង្ហាញថា $f(t) = \int_0^t sin\left[ln\left(\sqrt{x^2+1}+x\right)\right]$ ជាអនុគមន៍គូ ។

៣៨៨. បង្ហាញថា $f(x)=\int_0^x \left(cos\left(sin\left(ln\left(\sqrt{t^2+1}+t\right)\right)\right)\right)dt$ ជាអនុគមន៍សេស ។

៣៨៩. បង្ហាញថា $g(x)=\int_0^x f(t)dt$ ជាអនុគមន៍គូដែល $f(x)$ ផ្ទៀងផ្ទាត់ទំនាក់ទំនង $f(x+y)=f(x)+f(y)$ ។

៣៩០. បើ $f(x)=\int_0^x \frac{e^t}{t}dt, x>0$ បង្ហាញថា $\int_1^x \frac{e^t}{t+\alpha}dt=e^{-\alpha}[f(x+a)-f(1-a)]$ ។

៣៩១. គេឲ្យ $\int_0^1 \frac{sint}{1+t}dt=\alpha$ បង្ហាញថា $\int_{4\pi-2}^{4\pi} \frac{sin(t/2)}{4\pi+2-t}dt=-\alpha$ ។

៣៩២. បើ $\int_a^b \frac{sin(x-a)-cos(x-a)}{sin(b-x)-cos(b-x)}dx=m\int_a^b \frac{sin(b-x)-cos(b-x)}{sin(x-a)-cos(x-a)}dx$ ចូររកតម្លៃ m ។

៣៩៣. បើ $\int_0^1 \frac{e^t}{t+1}dt=a$ បង្ហាញថា $\int_{b-1}^b \frac{e^{-t}}{t-b-1}dt=-ae^{-b}$ ។

៣៩៤. តាង $F(x)$ ជាអនុគមន៍វិជ្ជមានជាប់កំណត់លើ $\mathbb{R}$ ដែល $F(x)+F\left(x+\frac{1}{2}\right)=3$ បង្ហាញថា $\int_0^{1500} F(x)dx=2250$ ។

៣៩៥. បង្ហាញថា $k=2^{-m}$ បើ $\int_0^{\pi/2} sin^m xcis^m xdx=k\int_0^{\pi/2} sin^m xdx$ ។

៣៩៦. បង្ហាញថា $N=3M$ បើ $M=\int_0^{\pi} f(cos^2 x)dx$ និង $N=\int_0^{3\pi} f(cos^2 x)dx$

៣៩៧. រកសមីការបន្ទាត់ប៉ះទៅនឹងខ្សែកោង $y=\int_{x^2}^{x^3} \frac{1}{\sqrt{1+t^2}}dt$ ត្រង់ $x=1$ ។

៣៩៨. រកចន្លោះដែលអនុគមន៍ $f(x)=\int_0^x e^t(t-1)(t-2)dt$ កើនដាច់ខាត។

៣៩៩. រកចំណុចអតិបរមា និងអប្បបរមានៃអនុគមន៍

$f(x) = \int_0^x e^t(t+1)(t-2)dt$ ។

៤០០. រកចំណុចរបត់ចំពោះខ្សែកោង $f(x) = e^t(t-1)^3(t-2)^2dt$ ។

៤០១. បង្ហាញថាសមីការ $y = \int_{1/10}^{sin^2x} sin^{-1}\sqrt{t}dt + \int_{1/10}^{sin^2x} cos^{-1}\sqrt{t}dt$ ជាបន្ទាត់ស្រប់នឹងអ័ក្សរអាប់ស៊ីសដែល $0 \le x \le \frac{\pi}{2}$ ។

៤០២. បើ $F(x) = \int_x^{2x} \sqrt{5-3sin^2t}dt + \int_0^y sintdt$ នោះចូររក $F'(x)$ ។

៤០៣. គណនា $f'(1)$ បើ $f(x) = \int_{1/x^2}^{x^2} cos\sqrt{t}dt$ ។

៤០៤. បើ $\int_0^{50\pi} sin^4x + cos^4xdx = k\int_0^{\pi/2} \left(\frac{3}{4} + \frac{1}{4}cos4x\right)dx$ នោះរក k ។

៤០៥. បើ $f(a+b-x) = f(x)$ បង្ហាញថា $\int_a^b xf(x)dx = \frac{a+b}{2}\int_a^b f(x)dx$ ។

៤០៦. តាង $M = \int_0^1 \frac{e^t}{1+t}dt$ និង $N = \int_0^1 e^t log(1+t)dt$
បង្ហាញថា $M + N = e \times log2$ ។

៤០៧. តាង $a_n = \int_0^{\pi/2} \frac{cos^2(nx)}{sinx}dx$ បង្ហាញថា $a_2 - a_1, a_3 - a_2, a_4 - a_3$ ជាស្ទីតនព្វន្ត ។

៤០៨. បង្ហាញថា $\int_{1/e}^{tanx} \frac{1}{1+t^2}dt + \int_{1/e}^{cotx} \frac{1}{t(1+t^2)}dt = 1$ ។

៤០៩. បង្ហាញថា $I_n + I_{n-2} = \frac{1}{n-1}$ បើ $I_n = \int_0^{\pi/2} tan^nxdx$ ។

៤១០. បង្ហាញថា $\int_0^{\pi/2} \left(\frac{sin(n\theta)}{sin\theta}\right)^2 d\theta = n\pi$ ។

៤១១. បើ $\int_0^1 3x^2 + 2x + kdx = 0$ នោះចូររកតម្លៃ k ។