

1. $\int \frac{1}{\cos(\theta)-1} d\theta$

#14. $\int \sec^6(3x) dx$

2. $\int e^x \cos(x) dx$

15. $\int \tan^6(x) dx$

3. $\int_0^{\pi/4} e^{-x} \cos(x) dx$

16. $\int \tan^3(\frac{\pi x}{2}) \sec^2(\frac{\pi x}{2}) dx$

4. $\int \cos(2x) \cos(3x) dx$

17. $\int \frac{\tan^2(x)}{\sec^5(x)} dx$

5. $\int \sin^2(x) \cos^2(x) dx$

18. $\int \sin(4x) \cos(3x) dx$

6. $\int_0^3 \frac{x^3}{\sqrt{x^2+9}} dx$

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

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

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

10. $\lim_{x \rightarrow 1} \frac{\ln(x)}{x-1}$

11. $\lim_{x \rightarrow 0^+} x^{1/x}$

12. $\int_0^{\infty} x e^{-x/2} dx$

13. $\int_0^6 \frac{4}{\sqrt{6-x}} dx$

1. $\int \cos^3(2x) \sin^2(2x) dx$
2. $\int \frac{\sqrt{9-x^2}}{x^2} dx$
3. $\int e^{2x} \cos(3x) dx$
4. $\int \frac{6x^2 - 3x + 11}{x^3 - 2x^2 + 4x - 8} dx$
5. $\int_0^5 \frac{dx}{\sqrt{25-x^2}}$
6. $\int x^2 \cos(x) dx$
7. $\int [\sin(5x) + \cos(5x)]^2 dx$
8. $\int_0^{1/2} \cos^{-1}(x) dx$
9. $\int \frac{4}{3e^x - 2} dx$
10. $\int \frac{1}{\sqrt{1-4x-x^2}} dx$
11. $\int_0^1 \ln(1+x^2) dx$
12. $\int \frac{1}{x^2 \sqrt{x^2+4}} dx$
13. $\int \frac{x^2+5}{x^3-x^2+x+3} dx$
14. $\int_0^{\sqrt{3}/2} \frac{1}{(1-x^2)^{5/2}} dx$
15. $\lim_{x \rightarrow 0^+} \frac{e^x - (1+x)}{x^3}$
16. $\lim_{x \rightarrow \infty} \frac{e^{x/2}}{x}$
17. $\lim_{x \rightarrow 0} (e^x + x)^{1/x}$
18. $\int_4^{\infty} \frac{dx}{x [\ln(x)]^3}$
19. $\int_2^4 \frac{dx}{\sqrt{x^2-4}}$