Mixed Integrals

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

2.
$$\int x \sec x \tan x \ dx$$

3.
$$\int x \ln(x+1) \ dx$$

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

5.
$$\int \frac{x^2 + 12x + 12}{x^3 - 4x} \ dx$$

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

7.
$$\int \sin^3 2x \sqrt{\cos 2x} \ dx$$

8.
$$\int (x^2 - 1)e^x dx$$

9.
$$\int \tan^5 2x \sec^4 2x \ dx$$

10.
$$\int \frac{x^2 + 12x + 12}{x^3 - 4x} \ dx$$

11.
$$\int \frac{1}{(16-x^2)^{3/2}} \ dx$$

12.
$$\int \frac{\cot^3 x}{\csc x} \ dx$$

13.
$$\int \arcsin x \ dx$$

14.
$$\int \frac{x^2 - 1}{x^3 + x} dx$$

15.
$$\int \frac{x^3}{x^4 - 2x^2 - 8} \ dx$$

16.
$$\int \frac{x^2}{\sqrt{2x-x^2}} dx$$

$$17. \int e^{-x} \sin 2x \ dx$$

18.
$$\int \sin \sqrt{x} \ dx$$

19.
$$\int \sin(-4x)\cos 3x \ dx$$

$$20. \int \frac{\sqrt{x^2 - 25}}{x} dx$$

21.
$$\int \frac{x^2 + x + 3}{x^4 + 6x^2 + 9} \ dx$$

22.
$$\int x \sec^2 x \ dx$$

23.
$$\int \sqrt{9-25x^2} \ dx$$

24.
$$\int \sec^3 x \ dx$$

25.
$$\int \frac{\sec^2 x}{\tan^2 x + 5 \tan x + 6} \ dx.$$

26.
$$\int \cos(\ln x) \ dx$$

$$27. \int \sin^2 x \cos^4 x \ dx$$

$$28. \int \sqrt{x^2 - 4} \ dx$$

29.
$$\int \arctan x \ dx$$

30.
$$\int \frac{1}{x\sqrt{\ln^2 x + 2}} dx$$