

$$1) \int \sqrt{x} \cdot \ln x \, dx$$

$$2) \int \frac{\ln x}{x} \, dx$$

$$3) \int \frac{\ln x}{x^2} \, dx$$

$$4) \int \frac{1}{x (\ln x)^2} \, dx$$

$$5) \int x (\ln x)^2 \, dx$$

$$6) \int \tan^3 x \, dx$$

$$7) \int_0^{\pi/4} \frac{\tan^3(x)}{\cos^2(x)} \, dx$$

$$8) \int \cos^3 x \, dx$$

$$9) \int \sin^2 x \, dx$$

$$10) \int \sin^2 x \cdot \cos^3 x \, dx$$

$$11) \int \frac{e^x}{1+e^{2x}} \, dx$$

$$12) \int_0^{\sqrt{3}} x \tan^{-1} x \, dx$$

$$13) \int \frac{\tan^2 t \cdot \sec^2 t}{1+\tan t} \, dt$$

$$14) \int \tan^3 x \cdot \sin^2 x \, dx$$

$$15) \int \sin t \cdot \cos t e^{\cos t} \, dt$$

$$16) \int_0^{\pi/3} \tan^4(\theta) \, d\theta$$

$$17) \int (\sec x)^3 \tan x \, dx$$

$$18) \int x \sec x \tan x \, dx$$