

$$(a) \int e^{x^2} x dx, \quad б) \int \frac{x dx}{1+x^4},$$

$$B) \int \frac{x^2}{\cos^2 x^3} dx$$

$$\int (e^{x^2})' dx = \int e^{x^2} d(x^2/2) = [t=x^2/2] = \int \frac{1}{2} e^t dt = \frac{1}{2} e^t + C = \frac{1}{2} e^{x^2/2} + C$$

$$\int \frac{x dx}{1+x^4} = \int \frac{d(x^2/2)}{1+(x^2/2)^2} = \int \frac{dt}{1+t^2} = \arctan t + C = \arctan(x^2/2) + C$$

$$\int \frac{x^2}{\cos^2(x^3)} dx = \int \frac{1}{\cos^2(x^3)} d(x^3/3) = \int \frac{1}{\cos^2 t} dt = \tan t + C = \tan(x^3/3) + C$$