



Calcule :

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

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

$$(3) \int \frac{x}{\sqrt{x+4}} \, dx$$

$$(4) \int \frac{x^2}{\sqrt{9-x^2}} dx$$

$$(5) \int \sqrt{3-2x}.x^2 dx$$

$$(6) \int \sqrt{3+x} \cdot (x+1)^2 dx$$

$$(7) \int \frac{dx}{\sqrt{2x-x^2}} \text{ (poser } u = x-1)$$

(8) $\int \frac{e^x}{25 + e^{2x}} dx$

(9) $\int x^2 \sqrt{1-x} dx$