

$$\int x^n dx = \frac{x^{n+1}}{n+1} + C \quad n \neq -1$$

$$\bullet \int 6x^5 dx$$

$$\int 6x^5 dx = 6 \cdot \int x^5 dx = \cancel{6} \cdot \frac{x^6}{\cancel{6}} + C = x^6 + C$$