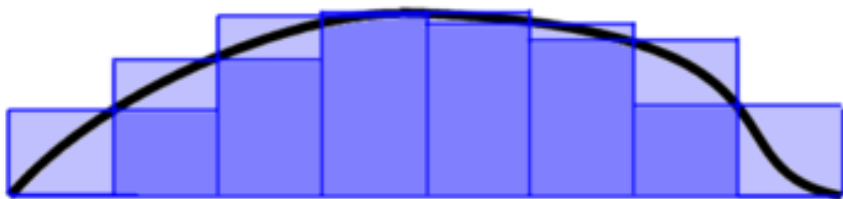


## 참고: 적분 (integration)

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## 리만적분과 르베그 적분



- 유리함수

$$\int k dx = kx + C$$

$$\int x^a dx = \frac{x^{a+1}}{a+1} + C \text{ for } a \neq -1$$

$$\int \frac{1}{x} dx = \ln|x| + C$$

# 적분공식

- 지수함수

$$\int e^{ax} dx = \frac{1}{a} e^{ax} + C$$
$$\int f'(x) e^{f(x)} dx = e^{f(x)} + C$$
$$\int a^x dx = \frac{a^x}{\ln a} + C$$

- 로그함수

$$\int \ln x dx = x \ln x - x + C$$
$$\int \log_a x dx = x \log_a x - \frac{x}{\ln a} + C$$