





$\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$

$\int_{-\infty}^{\infty} f(x) \delta(x) dx = f(0)$

$\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$

2.1.1

$\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$

2.1.2 (Consider $\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$):

- $\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = 50 \int_{-\infty}^{\infty} f(x) \delta(x-a) dx$
- $\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = \$10 \int_{-\infty}^{\infty} f(x) \delta(x-a) dx$
- $\int_{-\infty}^{\infty} f(x) \delta(x-a) dx = \int_{-\infty}^{\infty} f(x) \delta(x-a) dx$

