

$$\int \sin 3x \, dx;$$

$$u = 3x$$

$$du = 3 \, dx$$

$$dx = \frac{1}{3} \, du$$

$$\int \sin 3x \, dx = \frac{1}{3} \int \sin u \, du$$

$$= -\frac{1}{3} \cos u + C$$

$$= -\frac{1}{3} \cos 3x + C$$
