

## Example

Find the following indefinite integrals (simplify your answers).

$$(a) \int (2x - x^3 + 3) \, dx$$

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

$$(c) \int \left( \frac{2x^2 + 5x}{x} \right) \, dx$$

## Example

Find the following indefinite integrals (simplify your answers).

$$(a) \int 3e^t \, dt$$

$$(b) \int e^{3t} \, dt$$

$$(c) \int 3e^{2u} \, du$$

$$(d) \int 5^{-2x} \, dx$$

## Example

Find the following indefinite integrals (simplify your answers).

(a)  $\int \frac{2}{x} dx$

(b)  $\int \left( e^{3t} - \frac{3}{t} \right) dt$

## Example

Bob's Bakery determines the marginal cost of buttermilk is

$$C'(x) = \frac{10}{\sqrt{x}}$$

and that the fixed cost is \$100.

Find the cost function  $C(x)$ .