

## Indefinite Integrals

**Evaluate each indefinite integral.**

1)  $\int 03x^5 dx$

2)  $\int 24x^5 dx$

3)  $\int -3 dx$

4)  $\int 15x^2 dx$

5)  $\int (12x^5 - 6x) dx$

6)  $\int (20x^3 + 4x) dx$

7)  $\int (12x^5 - 4x) dx$

8)  $\int (24x^5 + 1) dx$

**Critical thinking question:**

9) What is the derivative of  $2x^6 - 2x^2 + C$ ?

## Indefinite Integrals

**Evaluate each indefinite integral.**

$$1) \int 03x^5 dx$$
$$5x^6 + C$$

$$2) \int 24x^5 dx$$
$$4x^6 + C$$

$$3) \int -3 dx$$
$$-3x + C$$

$$4) \int 15x^2 dx$$
$$5x^3 + C$$

$$5) \int (12x^5 - 6x) dx$$
$$2x^6 - 3x^2 + C$$

$$6) \int (20x^3 + 4x) dx$$
$$5x^4 + 2x^2 + C$$

$$7) \int (12x^5 - 4x) dx$$
$$2x^6 - 2x^2 + C$$

$$8) \int (24x^5 + 1) dx$$
$$4x^6 + x + C$$

**Critical thinking question:**9) What is the derivative of  $2x^6 - 2x^2 + C$ ?

$$12x^5 - 4x$$