

## Indefinite Integrals

**Evaluate each indefinite integral.**

1)  $\int 30x^5 dx$

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)  $\int 30x^5 dx$   
 $5x^6 + C$

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  $2x^6 - 2x^2 + C$ ?  
 $12x^5 - 4x$