

## Calculus Practice: Indefinite Integrals 1b

Evaluate each indefinite integral.

1)  $\int 40x^3 dx$

2)  $\int 49x^6 dx$

3)  $\int (48x^5 + 5x^4) dx$

4)  $\int 72x^8 dx$

5)  $\int -16x dx$

6)  $\int 20x^3 dx$

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

8)  $\int (27x^8 - 35x^6 + 16x) dx$

9)  $\int (100x^9 - 48x^7 + 24x^5) dx$

10)  $\int (27x^8 + 27x^2) dx$

$$11) \int \frac{5(-4x-1)}{x^6} dx$$

$$12) \int \left( -\frac{6}{x^4} + \frac{20}{x^6} - \frac{14}{x^8} \right) dx$$

$$13) \int (-3x^{-2} - 12x^{-3} - 8x^{-9}) dx$$

$$14) \int (-8x^{-5} - 10x^{-6}) dx$$

$$15) \int \left( -\frac{5}{x^6} - \frac{24}{x^9} \right) dx$$

$$16) \int -\frac{20}{x^3} dx$$

$$17) \int -32x^{-5} dx$$

$$18) \int \frac{-8x^5 - 49}{x^8} dx$$

$$19) \int \frac{-12x - 35}{x^6} dx$$

$$20) \int \frac{36}{x^7} dx$$

## Calculus Practice: Indefinite Integrals 1b

Evaluate each indefinite integral.

1)  $\int 40x^3 dx$

$$10x^4 + C$$

2)  $\int 49x^6 dx$

$$7x^7 + C$$

3)  $\int (48x^5 + 5x^4) dx$

$$8x^6 + x^5 + C$$

4)  $\int 72x^8 dx$

$$8x^9 + C$$

5)  $\int -16x dx$

$$-8x^2 + C$$

6)  $\int 20x^3 dx$

$$5x^4 + C$$

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

$$x^8 + 5x^2 - 4x + C$$

8)  $\int (27x^8 - 35x^6 + 16x) dx$

$$3x^9 - 5x^7 + 8x^2 + C$$

9)  $\int (100x^9 - 48x^7 + 24x^5) dx$

$$10x^{10} - 6x^8 + 4x^6 + C$$

10)  $\int (27x^8 + 27x^2) dx$

$$3x^9 + 9x^3 + C$$

$$11) \int \frac{5(-4x-1)}{x^6} dx$$
$$\frac{5}{x^4} + \frac{1}{x^5} + C$$

$$12) \int \left( -\frac{6}{x^4} + \frac{20}{x^6} - \frac{14}{x^8} \right) dx$$
$$\frac{2}{x^3} - \frac{4}{x^5} + \frac{2}{x^7} + C$$

$$13) \int (-3x^{-2} - 12x^{-3} - 8x^{-9}) dx$$
$$\frac{3}{x} + \frac{6}{x^2} + \frac{1}{x^8} + C$$

$$14) \int (-8x^{-5} - 10x^{-6}) dx$$
$$\frac{2}{x^4} + \frac{2}{x^5} + C$$

$$15) \int \left( -\frac{5}{x^6} - \frac{24}{x^9} \right) dx$$
$$\frac{1}{x^5} + \frac{3}{x^8} + C$$

$$16) \int -\frac{20}{x^3} dx$$
$$\frac{10}{x^2} + C$$

$$17) \int -32x^{-5} dx$$
$$\frac{8}{x^4} + C$$

$$18) \int \frac{-8x^5 - 49}{x^8} dx$$
$$\frac{4}{x^2} + \frac{7}{x^7} + C$$

$$19) \int \frac{-12x - 35}{x^6} dx$$
$$\frac{3}{x^4} + \frac{7}{x^5} + C$$

$$20) \int \frac{36}{x^7} dx$$
$$-\frac{6}{x^6} + C$$