

## Power Rule ... Set 1

### Integration Power Rule

Evaluate each indefinite integral.

1)  $\int -24x^5 dx$

2)  $\int -3 dx$

3)  $\int -6x dx$

4)  $\int 12x^2 dx$

5)  $\int (-24x^5 - 10x) dx$

6)  $\int (-9x^2 + 10x) dx$

7)  $\int 4x^{-5} dx$

8)  $\int -2x^{-3} dx$

# Power Rule ... Set 1

## Answers

### Integration Power Rule

Evaluate each indefinite integral.

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

$$2) \int -3 dx$$
$$-3x + C$$

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

$$4) \int 12x^2 dx$$
$$4x^3 + C$$

$$5) \int (-24x^5 - 10x) dx$$
$$-4x^6 - 5x^2 + C$$

$$6) \int (-9x^2 + 10x) dx$$
$$-3x^3 + 5x^2 + C$$

$$7) \int 4x^{-5} dx$$
$$-\frac{1}{x^4} + C$$

$$8) \int -2x^{-3} dx$$
$$\frac{1}{x^2} + C$$

## Power Rule ... Set 1

$$9) \int (-2x^{-3} + 20x^{-5}) dx$$

$$10) \int (-4x^{-3} - 20x^{-5}) dx$$

$$11) \int \left( -\frac{4}{x^3} - \frac{8}{x^5} \right) dx$$

$$12) \int \left( \frac{15}{x^4} + \frac{8}{x^5} \right) dx$$

$$13) \int -\frac{14x^{\frac{5}{2}}}{2} dx$$

$$14) \int -\frac{35x^{\frac{2}{5}}}{5} dx$$

$$15) \int -\frac{5\sqrt[3]{x^2}}{3} dx$$

$$16) \int -\frac{5\sqrt[4]{x}}{2} dx$$

## Power Rule ... Set 1

### Answers

$$9) \int (-2x^{-3} + 20x^{-5}) dx$$
$$\frac{1}{x^2} - \frac{5}{x^4} + C$$

$$10) \int (-4x^{-3} - 20x^{-5}) dx$$
$$\frac{2}{x^2} + \frac{5}{x^4} + C$$

$$11) \int \left( -\frac{4}{x^3} - \frac{8}{x^5} \right) dx$$
$$\frac{2}{x^2} + \frac{2}{x^4} + C$$

$$12) \int \left( \frac{15}{x^4} + \frac{8}{x^5} \right) dx$$
$$-\frac{5}{x^3} - \frac{2}{x^4} + C$$

$$13) \int -\frac{14x^{\frac{5}{2}}}{2} dx$$
$$-2x^{\frac{7}{2}} + C$$

$$14) \int -\frac{35x^{\frac{2}{5}}}{5} dx$$
$$-5x^{\frac{7}{5}} + C$$

$$15) \int -\frac{5\sqrt[3]{x^2}}{3} dx$$
$$-x^{\frac{5}{3}} + C$$

$$16) \int -\frac{5\sqrt[4]{x}}{2} dx$$
$$-2x^{\frac{5}{4}} + C$$