Candle Center - Infinite Calculus

Name_____

Integration Power Rule

Date_____ Period____

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

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

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

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

Candle Center - Infinite Calculus

Name_____

Integration Power Rule

Date_____ Period____

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

$\frac{1}{x^2} + C$

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

$\frac{1}{x^2} - \frac{5}{x^4} + C$

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

$\frac{2}{x^2} + \frac{5}{x^4} + C$

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

$-2x^{\frac{5}{4}} + C$