Name : _____ Score : _____

Teacher : _____ Date : _____

First Fundamental Theorem of Calculus

Evaluate each definite integral. Round to the nearest ten-thousandth.

1) $\int_{5}^{6} e^{2x-12}\,dx$

2) $\int_{0}^{1} (-x^4 + 7x^3 - 10x^2)\,dx$

3) $\int_{4}^{7} \left(\frac{-8(x^2 + 4)}{(x^2 - 4)^2} \right) dx$

4) $\int_{5}^{9} \sin(-3x + 21)\,dx$

5) $\int_{-3}^{-2} (x^4 - 12x^3 + 36x^2)\,dx$

6) $\int_{2}^{4} \left(-1 + \frac{1}{(x + 1)^2} \right) dx$

7) $\int_{-3}^{1} (-x^3 + 3x^2 - 3x + 1)\,dx$

8) $\int_{-5}^{-1} (x^5 - 12x^4 + 45x^3 - 50x^2)\,dx$

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First Fundamental Theorem of Calculus

Evaluate each definite integral. Round to the nearest ten-thousandth.

9) $\int_{5}^{7} \cos(-3x)\,dx$

10) $\int_{2}^{3} (-x^5 + 6x^4 - 9x^3)\,dx$

11) $\int_{-2}^{-1} (-x^3 + 16x^2 - 85x + 150)\,dx$

12) $\int_{5}^{6} e^{x-5}\,dx$

13) $\int_{4}^{6} \cos(x - 4)\,dx$

14) $\int_{-2}^{1} (-x^3 + 10x^2 - 27x + 18)\,dx$

15) $\int_{4}^{6} (x^5 - 9x^4 + 18x^3)\,dx$

16) $\int_{0}^{1} (x^4 - 8x^3 + 12x^2)\,dx$

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First Fundamental Theorem of Calculus

Evaluate each definite integral. Round to the nearest ten-thousandth.

1) $\int_{5}^{6} e^{2x-12}\,dx$

0.4323

2) $\int_{0}^{1} (-x^4 + 7x^3 - 10x^2)\,dx$

-1.7833

3) $\int_{4}^{7} \left(\frac{-8(x^2 + 4)}{(x^2 - 4)^2} \right) dx$

-1.4222

4) $\int_{5}^{9} \sin(-3x + 21)\,dx$

0

5) $\int_{-3}^{-2} (x^4 - 12x^3 + 36x^2)\,dx$

465.2

6) $\int_{2}^{4} \left(-1 + \frac{1}{(x + 1)^2} \right) dx$

-1.8667

7) $\int_{-3}^{1} (-x^3 + 3x^2 - 3x + 1)\,dx$

64

8) $\int_{-5}^{-1} (x^5 - 12x^4 + 45x^3 - 50x^2)\,dx$

-19188.2667

Name : _____ Score : _____

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First Fundamental Theorem of Calculus

Evaluate each definite integral. Round to the nearest ten-thousandth.

9) $\int_{5}^{7} \cos(-3x)\,dx$

0.0621

10) $\int_{2}^{3} (-x^5 + 6x^4 - 9x^3)\,dx$

-3.8833

11) $\int_{-2}^{-1} (-x^3 + 16x^2 - 85x + 150)\,dx$

318.5833

12) $\int_{5}^{6} e^{x-5}\,dx$

1.7183

13) $\int_{4}^{6} \cos(x - 4)\,dx$

0.9093

14) $\int_{-2}^{1} (-x^3 + 10x^2 - 27x + 18)\,dx$

128.25

15) $\int_{4}^{6} (x^5 - 9x^4 + 18x^3)\,dx$

-380.2667

16) $\int_{0}^{1} (x^4 - 8x^3 + 12x^2)\,dx$

2.2