

WEEK 6 HW - Integration

Date _____ Period _____

Evaluate each indefinite integral.

1) $\int 25x^4(5x^5 - 2)^5 dx$

2) $\int 3x^2(x^3 - 4)^5 dx$

3) $\int (3x^5 + 1)^5 \cdot 75x^4 dx$

4) $\int 24x^3(3x^4 + 1)^3 dx$

5) $\int 36x^2 \cos(3x^3 - 5) dx$

6) $\int 4x^3 \sin(x^4 - 2) dx$

7) $\int \frac{6x^2}{\sec(x^3 + 3)} dx$

8) $\int -\frac{60x^4}{\cos^2(3x^5 - 2)} dx$

Answers to WEEK 6 HW - Integration (ID: 1)

1) $\frac{1}{6}(5x^5 - 2)^6 + C$

2) $\frac{1}{6}(x^3 - 4)^6 + C$

3) $\frac{5}{6}(3x^5 + 1)^6 + C$

4) $\frac{1}{2}(3x^4 + 1)^4 + C$

5) $4\sin(3x^3 - 5) + C$

6) $-\cos(x^4 - 2) + C$

7) $2\sin(x^3 + 3) + C$

8) $-4\tan(3x^5 - 2) + C$