Tutor-USA.com Worksheet
Calculus – Integration by Substitution

Name: _____
Date: _____ **Period:** _____ **Score:** _____

Evaluate the indefinite integral. Check your result by differentiation.

1) $\int \sqrt{1-4y}\, dy =$

2) $\int x\sqrt[3]{x^2-9}\, dx =$

3) $\int x^2(x^3-1)^{10}\, dx =$

4) $\int \frac{y^3}{(1-2y^4)^5}\, dy =$

5) $\int (x-2)(x^2-4x+4)^{4/3}\, dx =$

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

7) $\int \cos 4\theta d\theta =$

8) $\int 6x^2 \sin x^3\, dx =$

9) $\int \sec^2 5x dx =$

10) $\int \frac{\sin x}{\cos^2 x} dx$

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11) $\int y \csc 3y^2 \cot 3y^2 dy =$

12) $\int \cos x(2 + \sin x)^5 dx =$

13) $\int \sqrt{1 + \frac{1}{3x}} \frac{dx}{x^2} =$

14) $\int 2 \sin x \sqrt[3]{1 + \cos x}\ dx =$

15) $\int \cos\ ^2t \sin t\, dt =$