
DIRECTIONS To receive full credit, you must provide complete legible solutions to the following problems in the space provided. Transfer all your answers to the space provided on the test paper.

1. Use an appropriate substitution to evaluate the indefinite integrate Ans _____

$$\int (x^5 - 1)^{10} x^4 dx$$

2. Use an appropriate substitution to evaluate the indefinite integrate Ans _____

$$\int \frac{\cos x}{1 - \sin x} dx$$

3. Use an appropriate substitution to evaluate the definite integral Ans _____

$$\int_0^1 \frac{x dx}{1 + x^4}$$

4. Use an appropriate substitution to evaluate the definite integral Ans _____

$$\int_1^2 \frac{x^2}{\sqrt{x^2+1}} dx$$

5. Use an appropriate substitution to evaluate the definite integral Ans _____

$$\int_1^2 x\sqrt{2x-1} dx$$