

International Institute for  
Technology and Management



## Tutoring Sheet #9

Unit 05a : Mathematics 1

Evaluate the following integrals:

1.  $\int (3x^2 + 2x - 5)dx$

2.  $\int x\sqrt{x}dx$

3.  $\int_0^4 \frac{dx}{\sqrt{x}}$

4.  $\int_0^2 x(x^4 + 2)dx$

5.  $\int \frac{dx}{x^2}$

6.  $\int \frac{(x+1)dx}{x^2}$

7.  $\int \frac{x^3 - 3x^2 + 6x}{x}dx$

8.  $\int (x+2)^9 dx$

9.  $\int_1^2 2x(x^2 + 3)^4 dx$

10.  $\int x(3x+5)^7 dx$

11.  $\int x(2x^2 + 7)^8 dx$

12.  $\int x\sqrt{x-1} dx$