



Tutoring Sheet #10

Unit 05a : Mathematics 1

HomeWork to be submitted :# 2,4,6,8,9,13

Evaluate the following integrals:

1. $\int (x^3 - 14x^2 + 20x + 3)dx$

2. $\int (2 + e^{-x}) dx$

3. $\int \left(\frac{1}{t^2} - \frac{2}{\sqrt{t}}\right)dt$

4. $\int_0^7 qe^{qt} dt$

5. $\int (6x^{-3} + 4x^{-1})dx$

6. $\int \left(\frac{3}{x} + 4e^{-5x}\right)dx$

7. $\int \frac{dt}{1-2t}$

8. $\int \frac{7}{3-4t} dt$

9. $\int 8xe^{3x^2} dx$

10. $\int \frac{3x^2 + 2}{x^3 + 2x - 5} dx$

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

12. $\int x^2(x^3 + 1)^4 dx$

13. $\int \frac{e^{2t}}{e^{2t} + 1} dt$

14. $\int_1^e \frac{3}{x} dx$