



COLLEGE OF ENGINEERING & TECHNOLOGY

Department : Basic and Applied Sciences

Lecturer : Dr. Hossam Shawky

Course : Mathematics 1

Course No. : BA 123

Homework Sheet No.1

Find $\frac{dy}{dx}$ for the following functions:

(1) $y = x^4 - 3x^{-2} + 15x + 10$

(2) $y = (\sqrt{x} - 3x)^8$

(3) $y = \frac{x^3 - 1}{x^3 + 1}$

(4) $y = (x^4 + 2x)^6 (x^{-3} + x^4)^5$

(5) $y = \left(\frac{x^4 + 2x}{x^3 - 2} \right)^4$

(6) $y = \sqrt{x^3 - 2x}$

GOOD LUCK
