Quiz 1

Problem1:

Given: Two points $P_1(x_1,y_1)$ and $P_2(x_2,y_2)$

Find:

1. Equation of the line joining the two points
2. The mid-point of the two points

Hint:

Line equation: $y = mx + c$ where: $m = (y_2 - y_1) / (x_2 - x_1)$

printf("y = %fx + %f",m,c)

Problem2:

Given: A 4th order equation $aX^4 + bX^3 + cX^2 + dX + e = 0$

Required: Differentiate the equation and output the differentiated form

Output: AX^3 + BX^2 + CX + D = 0

Hint: bX^3 = bX^3

Bonus:

Given: The radius and height of a cylinder

Find:

1) Volume
2) Surface area
3) Surface area without top cover