



# COLLEGE OF ENGINEERING & TECHNOLOGY

Department : Computer Engineering .....

Lecturer : Dr. Manal Helal .....

Course : Computer Graphics .....

Course No. : CC416 .....

TAs : Eng. Hossam El Hawary , Eng. Nour S. Eissa .....

## Sheet II

### Section Practice

- 1) Plot the following *Lines* using Bresenham's line algorithm. Show all the step necessary to draw calculate each vertex.

- a. Line A : (15, 10) → (20, 13)
- b. Line B : (10, 11) → (13, 15)
- c. Line C : (5, 12) → (10, 8)
- d. Line D : (4, 4) → (-1, 7)

- 2) Draw the following *Circles* using the Mid-Point circle algorithm. Show all the steps necessary to perform the required calculations.

- a. Circle A : Radius : 4 Center : (2, 3)
- b. Circle B : Radius : 3 Center : (-1, 5)
- c. Circle C : Radius : 2 Center : (2, 3)

- 3) [BONUS] Calculate the points where the following 2 circles graphically intersect on the screen.

- Circle A : Radius : 8 Center : (30, 20)
- Circle B : Radius : 8 Center : (34, 20)