Math.2 Autumn 2016 Mid-Term Exam-2 Group2 20 Marks Time 1 Hour

(1)State the definition of the circle.

(2)State the definition of the ellipse.

(3)Find the angle between the lines : $x^2 + 4xy - y^2 = 0$

(4)Determine the center and radius of circle : $x^2 + y^2 + 2x - 2y = 0$.

(b)Find the vertex, focus and sketch the parabola: $y^2 - 8x + 2y + 9 = 0$.

(6)Find center, vertices and sketch the ellipse : $x^2 + 4y^2 - 4x + 8y + 4 = 0$.

Good Luck *Dr. Mohamed Eid*