Name: _____   Date:

Course: _____   Nyack College

College Mathematics

QUIZ (CHAPTER 8.1 to 8.2)

Directions: Solve each equation. Make sure to SHOW ALL WORK.

A. Directions: Find the distance between the two points and the coordinates of the midpoint of the line segment formed by the two points.

(1) $(3, 4)$ and $(-2, 1)$

(2) $(3, 0)$ and $(5, 1)$

(3) $(-3,\ 5)$ and $(-1, 1)$

(4) $(0, 4)$ and $(-3, 12)$

(5) $(8, 4)$ and $(-7, 11)$

B. Directions: Find the center and radius for each circle. SHOW ALL WORK.

(6) $(x - 4)^2 + (y - 3)^2 = 25$

(7) $(x + 3)^2 + (y - 2)^2 = 49$

(8) $(x + 3)^2 + (y + 7)^2 = 169$

(9) $x^2 + y^2 + 4x + 6y + 9 = 0$

(10) $x^2 + y^2 - 2x + 4y - 4 = 0$

C. Directions: For each equation, find the x-intercept and y-intercept. SHOW ALL WORK.

(11) $3x + 2y = 12$

(12) $5x + 6y = 15$

(13) $x + y = 1$

(14) $y = 3x + 9$

(15) $(y - 3) = 12(x + 2)$

D. Directions: Write the equation for line (in any form) for the following points (SHOW ALL WORK):

(16) $(0, 4)\ and\ (-3, 12)$

(17) $(-2, 4)\ and\ (-1, 1)$

(18) $(2, 3)\ and\ (-4, -5)$

(19) $(1, 6)\ and\ (1, 8)$

(20) $(-4, 4)\ and\ (-3, 3)$