NAME _____

MAT 150 – Homework 1
Sections F.1 and F.2

Directions: Show all work and write your final answer in the space provided.

1. Find the distance between the points (3, –5) and (–5, 11). 1. _____

2. Find the intercepts of the equation $5x - 2y = 15$. x-int: _____

y-int: _____

3. Find the midpoint of the line segment containing the points (–7, 8) and (–1, –4). 3. _____

4. Find the distance between the points (2, 3) and (–6, –14). 4. _____

5. Find the intercepts of the equation $4x^2 + y = 4$. x-int: _____

y-int: _____

6. Find the midpoint of the line segment containing the points (8, –7) and (0, 12). 6. _____

7. Find the intercepts of the equation $y^2 = x + 9$. x-int: _____

y-int: _____

8. Find the intercepts of the equation $16x^2 + 4y^2 = 64$. x-int: _____

y-int: _____

9. Find the distance between the points (–7, 11) and (–2, 4). 9. _____

10. If (–2, b) is a point on the graph of $2x + 3y = 2$, what is b? 10. _____

11. Find the intercepts of the equation $y = x^2 + 16$. x-int: _____

y-int: _____

12. Find the midpoint of the line segment containing the points (–5, –9) and (7, 3). 12. _____

13. Find all points on the y-axis that are 5 units from the point (4, 4). 13. _____

14. Find the intercepts of the equation $y = \dfrac{x^2 - 1}{3x}$. x-int: _____

y-int: _____

15. Find all points having a y-coordinate of –3 whose distance from the point (1, 2) is 13. 15. _____