MS 100 College Algebra Test Two **Name:**

1. Add: $(16 + 2i) + (16 - 2i)$

2. Subtract: $(16 + 2i) - (16 - 2i)$

3. Multiply: $(16 + 2i)(16 - 2i)$

For each of the following **three** problems:

a. Find the y-intercept
b. Find the x-intercepts (roots)
c. Find the x-value for the axis symmetry
d. Find the coordinates of the vertex

4. $y = -x^2 - 32x - 252$

5. $y + 1736 = 7x^2 + 28x - 28$

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6. $y = x^2 + 32x + 260$

7. The following graph has the form $y = x^2 + bx + c$. Determine b and c. That is, use the graph to find the equation of the curve, the lead coefficient on the squared term being equal to one.