Name _____ Date _____

LESSON 3.1

Challenge Practice

For use with the lesson "Plot Points in a Coordinate Plane"

In Exercises 1–3, suppose the point (a, b) lies in Quadrant I. Describe the location of the specified point.

1. $(-a, -b)$
2. $(-b, a)$
3. $(b, -a)$

In Exercises 4–6, suppose that $a > 0$ and $b < 0$. Describe the location of the specified point.

4. (a, b^2)
5. (ab, a)
6. $(-a, -b^2)$

In Exercises 7–10, suppose $a > b$.

7. Could $(a - b, b - a)$ be in Quadrant II? *Explain* your reasoning.
8. Could (ab, a^2b) be in Quadrant II? *Explain* your reasoning.
9. Could $(a + b, -a + b)$ be in Quadrant II? *Explain* your reasoning.
10. Could (a^2b, ab^2) be in Quadrant II? *Explain* your reasoning.