Name _____ Date _____

4.3 Practice A

In Exercises 1 and 2, determine which of the lines, if any, are parallel. Explain.

1. Line a passes through $(-1, 1)$ and $(1, 3)$.
   Line b passes through $(3, 4)$ and $(0, 2)$.
   Line c passes through $(0, 1)$ and $(3, 3)$.

In Exercises 3 and 4, write an equation of the line that passes through the given point and is parallel to the given line.

2. $(1, 3); y = 2x - 5$

3. $(-2, 1); y = -4x + 3$

In Exercises 5 and 6, determine which of the lines, if any, are parallel or perpendicular. Explain.

4. Line a passes through $(-2, 3)$ and $(1, -1)$.
   Line b passes through $(-3, 1)$ and $(1, 4)$.
   Line c passes through $(0, 2)$ and $(3, -2)$.

In Exercises 7 and 8, write an equation of the line that passes through the given point and is perpendicular to the given line.

5. $(2, -3); y = \frac{1}{3}x - 5$