LESSON 7.6

NAME _____ DATE _____

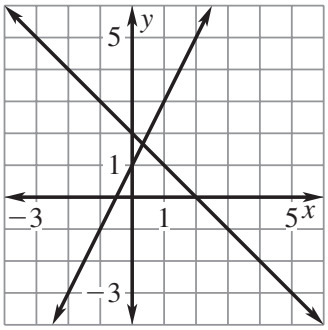
Available as a transparency

Activity Lesson Opener

For use with pages 432–438

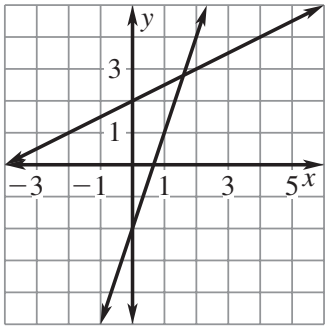
SET UP: Work with a partner.

Two lines are shown on the graph at the right. The equations of these lines are $y = 2x + 1$ and $y = -x + 2$.



1. Graph the point $(-2, 3)$ on the same grid.
2. Shade the region bounded by the two lines that contains this point.
3. Write the linear inequality for the half-plane that contains the point $(-2, 3)$ and is bounded by the line $y = 2x + 1$.
4. Repeat Question 3 using the line $y = -x + 2$.
5. What is true about the shaded region and the linear inequalities you wrote in Questions 3 and 4?

Two lines are shown on the graph at the right. The equations of these lines are $y = 3x - 2$ and $y = \frac{1}{2}x + 2$.



6. Graph the point $(1, -4)$ on the same grid.
7. Shade the region bounded by the two lines that contains this point.
8. Write the linear inequality for the half-plane that contains the point $(1, -4)$ and is bounded by the line $y = 3x - 2$.
9. Repeat Question 8 using the line $y = \frac{1}{2}x + 2$.
10. What is true about the shaded region and the linear inequalities you wrote in Questions 8 and 9?