Practice 2.6: Solving Linear Inequalities in Two Variables   A

For problems 1–7, graph the solution to each inequality.

1. $y > 2x$

2. $y > -3x + 1$

3. $y < -x + 3$

4. $y \le \dfrac{1}{4}x - 4$

5. $3x + y \ge 5$

6. $2x - y < 1$

7. $x > 4$

Use the given information to complete problems 8–10.

8. Gisele runs a company that makes tablet computers. Each tablet requires an employee to assemble it and an employee to test it. There are 25 employees or fewer available, depending on who is out sick or on vacation. Write an inequality that represents the number of employees Gisele has available to do the work and then graph the solution set.

9. At Binh's Greenhouse in early spring, there are many greenhouse plants to repot and many outside plants to water. If it takes Binh 5 minutes to repot each plant and 2 minutes to water each plant, and he has at most 2 hours before the greenhouse opens, what inequality represents the time Binh has to repot and water the plants before the greenhouse opens? What is the graph of the solution set?

10. Toya is training for a triathlon and wants to bike and run on the same day. She has less than 3 hours to spend on her workouts. What inequality represents the time Toya has to bike and run? What is the graph of the solution set?