**4-4 and 4-5 Additional Practice**

**1.** Match each inequality with its graph.

*y* < 2*x* − 1

*y* > −*x* + 3

*y* ≥ 2*x* – 1

*y* ≤ −*x* + 3



**Graph the inequality in the coordinate plane.**

**2.** *y* < *x*



**3.** *y* ≤ 3*x* −6



**4.** *x* − 2*y* > −4



**5.** Tickets to a play cost $10 at the door and $8 in advance. The theatre club wants to raise at least $800 from the sale of the tickets from the play. Write and  
graph an inequality for the number of tickets the theatre club needs to sell. If  
the club sells 40 tickets in advance, how many does it need to sell at the door to reach its goal? Use *x* to represent the number of tickets sold at the door. Use *y* to represent the number of tickets sold in advance.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6.** Graph *y* > 2*x* + 2 and *y* ≤ 2*x* − 5. | **Use the concept list to complete the statements.**   |  |  | | --- | --- | | **above the line** | ***y* ≤ 2x −5** | | ***y* > 2*x* + 2** | **below the line** |   **7.** The graph of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is shaded \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **8.** The graph of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is shaded \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **9.** What is the solution of the system of inequalities |

**Graph each system of inequalities. Shade the solution of each system.**

**10.** 



**11.** 



**12.** 



**The solution of what system of inequalities is shown by each graph?**

****13.**

**14.**

**15.**



**16.** Larissa plans to bake at most 10 loaves of bread.  
She makes x loaves of banana bread that sell for  
$1.25 each and y loaves of nut bread that sell for  
$1.50 each. She hopes to make at least $24 in sales.  
Write and graph a system of inequalities for this situation. What does the graph show?