

# 3-6a Homework Practice

## Graph Compound Inequalities

Write a compound inequality that represents each phrase. Graph the solutions.

- all real numbers that are less than  $-3$  or greater than or equal to  $5$
- The time a cake must bake is between  $25$  minutes and  $30$  minutes, inclusive.

Write each interval as an inequality (set builder). Then graph the solutions.

- |                                    |                  |
|------------------------------------|------------------|
| 3. $(-1, 10]$                      | 4. $[-3, 3]$     |
| 5. $(-\infty, 0]$ or $(5, \infty)$ | 6. $[3, \infty)$ |
| 7. $(-\infty, 4)$                  | 8. $[25, 50)$    |

Write each inequality or set in interval notation. Then graph the interval.

- |                            |                     |
|----------------------------|---------------------|
| 9. $x < -2$                | 10. $x > 0$         |
| 11. $x < -2$ or $x \geq 1$ | 12. $-3 \leq x < 4$ |

Write a compound inequality (set builder), set roster & interval notation that each graph could represent.

