

## Section 2.6 – Graphing Relationships

### Problem Set 1

**Graph the two inequalities then find the intersection and union of the sets represented by the graphs.**

1.  $x > 4$  and  $x > 6$

2.  $x < 5$  and  $x > 2$

3.  $y > 2$  and  $y \leq -3$

4.  $z > 6$  and  $z < 2$  and  $z \leq -3$

5.  $x > 5$  and  $x < -2$

6.  $x \leq 5$  and  $x \leq -3$

7.  $x \leq 4$  and  $x > 3$

8.  $x \geq 3$  and  $x > 7$

9.  $x > -3$  and  $x > 1$

10.  $x \geq -10$  and  $x < 17$

11.  $x > 1$  and  $x < 7$  and  $x \geq 2$

12.  $x < 4$  and  $x > 1$  and  $x < -3$

13.  $x > 0$  and  $x \leq 0$  and  $x \leq -3$

14.  $x \geq 4$  and  $x > 0$  and  $x < 12$