NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PERIOD\_\_\_\_

**8.3 – Graphing Systems of Inequalities**

State which of the following points are solutions to the system of inequalities graphed below.



1. $(0, 0)$ \_\_\_\_\_\_\_\_\_\_

2. $(-1, 4)$ \_\_\_\_\_\_\_\_\_\_

3. $(2, 5)$ \_\_\_\_\_\_\_\_\_\_

4. $(1, -1)$ \_\_\_\_\_\_\_\_\_\_

5. $(3, 2)$ \_\_\_\_\_\_\_\_\_\_

Solve each system of inequalities.

6. $x>5$ 7. $y<0$

 $y\leq 4$ $x\geq 0$





8. $y<-3$ 9. $y<2x+3$

 $ x-y>1$ $y<-x+1$





10. $x+4y<8$ 11. $3x-5y\geq -10$

 $3x-y\geq 4$ $4x-2y\leq 10$







A

B

12. Find the domain and range.

 D:\_\_\_\_\_\_\_\_\_\_\_\_ R:\_\_\_\_\_\_\_\_\_\_\_\_

13. Find the equation of the line containing the point $(4, -2)$ with $slope=-3$.

14. Solve: $–5(k+4)\geq 3(k-4 )$