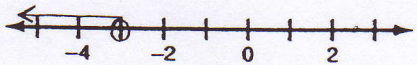
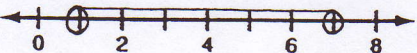
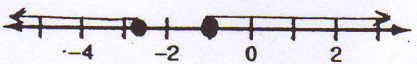


Math Analysis
Review for Ch. 3 test

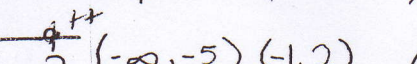
Name Ans. Key
Date 10/ Period 1

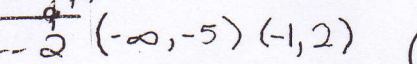
6. $\frac{5-4x}{2} < -3x$ $5-4x < -6x$ $5 < -2x$ $-\frac{5}{2} > x$
 $(-\infty, -\frac{5}{2})$

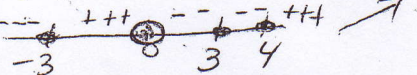
7. $|x-4| < 3$
 $x-4 < 3$
 $x-4 > -3$
 $x > 1$ $x < 7$
 $(1, 7)$

8. $|3x+7| \geq 4$
 $3x+7 \geq 4$ $3x+7 \leq -4$
 $(-\infty, -\frac{11}{3}] \cup [3, \infty)$

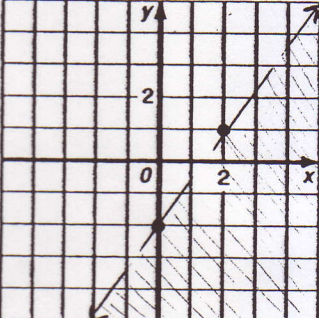
Solve each inequality:

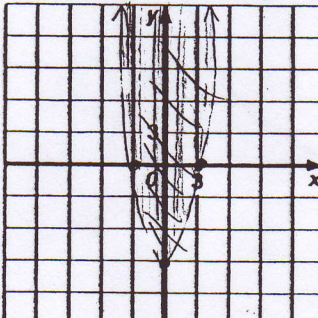
9. $y^3 - 6y^2 + 8y < 0$ $y(y^2 - 6y + 8) < 0$ $y(y-4)(y-2) < 0$
 $(0, 2) \cup (2, 4)$


10. $\frac{(x-2)(x+1)}{x+5} < 0$
 $(-\infty, -5) \cup (-1, 2)$

11. $\frac{(x+3)(x-3)^2(x-4)}{x} > 0$
 $(-\infty, -3) \cup (0, 3) \cup (3, 4)$

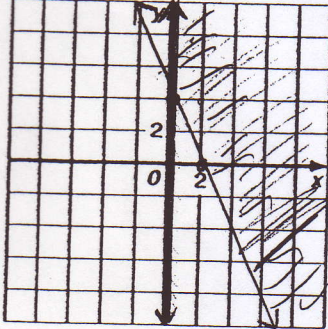
On the axes provided, graph the set of all (x, y) satisfying the given inequality:

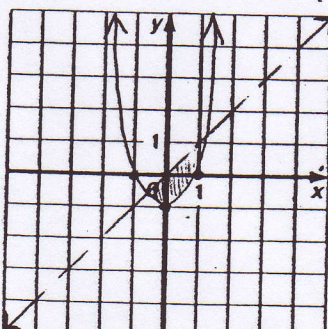
12. $3x - 2y > 4$
 $-2y > -3x + 4$
 $y < \frac{3}{2}x - 2$


13. $y > x^2 - 9$
 $x^2 - 9 = 0$
 $x^2 = 9$
 $x = \pm 3$


14. $y < x^3 - x^2 - 9x + 9$ $x^2(x-1) - 9(x-1)$
 $(x^2-9)(x-1)$
 $x^2=9$
 $x = \pm 3$


Graph the solution set of each system of inequalities.

15. $x \geq 0$
 $2x + y \geq 4$ $(0, 4)$ $(2, 0)$


16. $y < x$
 $y \geq x^2 - 1$


Graph $y = A|x-h| + k$
 vertex \downarrow
 horizontal \uparrow
 $y = 3|x-2| + 1$
 $(2, 1)$
