Algebra 1 Exam 2 Review Chapter 4, 5, and 6

Name:_____

1. What is Standard Form?

2. What is Point-Slope Form?

3. What is Slope Intercept Form?

Chapter 4: Writing Linear Equations

Write the equation of the line . Give answers in slope intercept form.

4. m = 3 b = 6

5. Slope = 2, y-intercept = 10

6. Slope = $\frac{1}{2}$, y-intercept = $-$ 4

7. point (1, 2),   m=6

8. (–3, 5), m = 2

9. (1, 2) and (3, 4)

10. ($-$ 5, 6) and (– 2, 9)

Write the equation in standard form.

11. y = 2x – 5

12. y = $-$ 8x + 4

13. y = 9x – 2

Write the equation in slope-intercept form.

14. 2x + 3y = 6

15. 4x + y = 15

16. 3x – 6y = 12

Write the equation of the line that is parallel.

17. (1, 2) and y = 3x – 5

18. (– 5, 3) and y = 2x + 5

Write the equation of the line that is perpendicular.

19. (1, 3) and y = $\frac{1}{2}x$ + 5

20. (– 2, 5) and y = – 2x + 8

Chapter 5 : Solving and Graphing Inequalities

Graph on a number line:

1. $x > 3$ 2. $-5 < x \leq 4$ 3. $x \leq -4$ or $x > 2$

Solve the inequality.

4. $x - 5 \geq 2$ 5. $3x + 5 < 11$ 6. $-4x \geq 12$ 7. $\frac{x}{5} < 3$

8. $3 + x \leq 4$ or $2x > 20$ 9. $3 \leq 2x - 1 < 13$

Solve the absolute value equations.

10. $|x| = 5$ 11. $|2x + 3| = 7$ 12. $2|x + 1| = 6$ 13. $|x - 4| < 7$

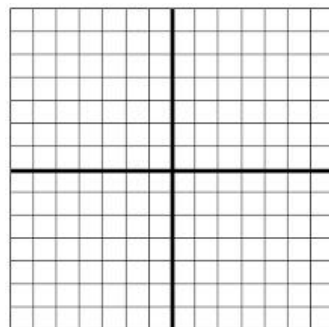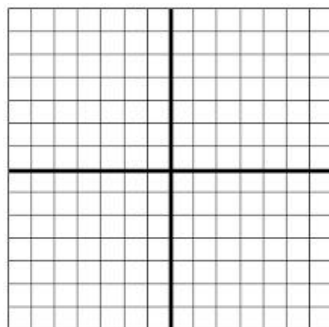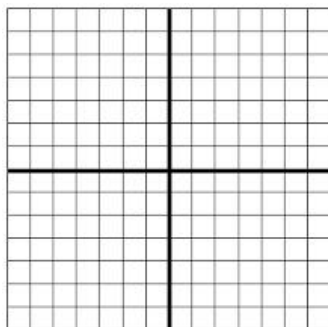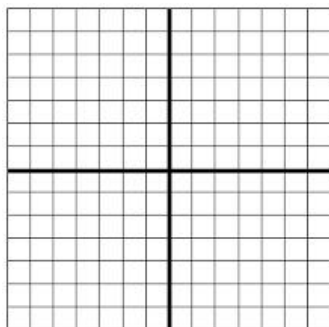14. $|2x + 3| \leq 5$ 15. $|x| > 4$ 16. $|x + 2| \geq 5$ 17. $|x + 5| = -9$

Graph the inequality. Remember to shade.

18. $y \leq 2x - 1$ 19. $2x + 3y > 6$ 20. $x \leq 3$ 21. $y > -3$

Chapter 6: Systems of Equations

Solve by Graphing.

22. $y = -x + 6$

    $x - y = 2$

23. $-x + y = -7$

    $x + 4y = -8$

Solve Using Substitution.

24. $y = 2x + 5$

    $3x + y = 10$

25. $3x + y = -7$

    $-2x + 4y = 0$

Solve Using Elimination.

26. $7x - 2y = 5$

    $7x \ 3y = 4$

27. $4x + 5y = 35$

    $-3x + 2y = -9$

Use any Method

28. $-2x - 5y = 9$

    $3x + 11y = 4$

29. $-2x + y = 4$

    $y = 1 - x$

Algebra 1A Exam 2 Review Chapter 4, 5, 6

Chapter 4: Writing Linear Equations

Know How to………

Write the equation of a line given slope and y-intercept
Write the equation of the line given point and slope
Write the equation of line given 2 points
Write equation in standard form
Write equation in slope-intercept form
Write equation of parallel line
Write equation of perpendicular line

Chapter 5: Linear Inequalities

Know how to……..

Graph inequalities on number line
Solve inequalities
Solve and/or inequalities
Solve absolute values
Graph inequalities and shade

Chapter 6: Systems

Know how to…..

Solve a system with graphing
Solve a system with substitution
Solve a system with elimination