Chaparral High School
Algebra II Review for Exam on Chapters 1 and 2
Linear Functions, Absolute Value Equations, Inequalities, and Graphs

This is a 50 minute exam to be completed without the aid of calculators. Please show all appropriate work and place answers in lowest terms. Please work independently. This exam will be scaled to 100 points. Good Luck!

1) (5 points) Solve the following equation.

$$8 - 4(2x - 3) + 5x = 3(4x - 3) - 3$$

2) (4 points) Solve for a in the equation given below.

$$ab - c(2 - a) = b(a - 3d)$$

3) (5 points) Solve the inequality given below. Graph the solution set.

$$4(5x - 7) - 6 < -2(3x - 4) - 1$$

4) (4 points) Solve the following Equation.

$$|5x - 11| + 2 = 7$$

5) (5 points) Solve and graph

$$|5x + 2| \leq 28$$

6) (5 points) Solve and graph

$$5|3w + 2| - 3 > 7$$

7) (5 points) Find the equation of the line passing through the points $(-2, 5)$ and $\left(\frac{1}{2}, \frac{-4}{3}\right)$.

8) (5 points) Find the equation of the line passing through the point $(-4, -3)$ and that is parallel to the line $4x - 7y = 9$.

9) (5 points) Graph the linear equation given below.

$$4x - 3y = 7$$

10) (6 points) Graph the piecewise function given below.

$$f(x) = \begin{cases} x - 2 & \text{if } x \leq 1 \\ -2x + 3 & \text{if } x > 1 \end{cases}$$

11) (6 points) Graph the equation given below by using translations (Horizontal and Vertical shifting).

$$y = -3(x - 4)^2 + 5$$

What is the domain? What is the range?

12) (5 points) Graph the inequality given below.

$$y < -2|x - 3| - 4$$