

Name _____

Each problem is worth 5 point: 3-points for Work/Explanation and 2 points for the correct answer (unless otherwise noted). *Use another piece of paper to complete your work.* Number the problems and box your answers. Partial credit will be awarded. Neatness counts. Single cross outs are ok.

Write and sign the Academic Honesty Statement below.

Signature _____

Simplify.

1) $5\{[6(x - 1) + 8] - [2(3x - 1) + 8]\}$

Solve and check your answer (-1 point if no check)

2) $-2x + 4(-2x - 3) = -14 - 8x$

Solve and graph the solution set. The answer is a fraction.

3) $-4x - (8x + 2) > 6 - (8x + 7)$

Write the equation of the line passing through the indicated points. Write your answer in slope-intercept, point-slope and standard form. Then graph the equation.

4) $(-5, 0)$ and $(7, -7)$

Find the function value. No calculator. Show the arithmetic.

5) Find $f(1.56)$ when $f(x) = -5.57x + 8$.

Solve using the substitution method. (-1 point if no solution check)

6) $y = 2x + 5$
 $3x + y = 15$

Solve the system of equations by the elimination method.

7) $x + 5y = -11$
 $7x + 4y = 47$

Solve by writing a Matrix Equation and using a graphing calculator

8) $x + y + z = 6$
 $x - z = -2$
 $y + 3z = 11$

Graph by completing the table and plotting points.

9) $f(x) = 5^x - 1$
See notebook

Solve this literal equation for the given letter.

10) $A = \frac{1}{2}h(b_1 + b_2)$ for b_1