Challenge 8 PS 3 Due 4/6/2020 at the beginning of class

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_____

Solve and graph the solution set. The answer may be a fraction.

1) $-9x - (2x + 5) > 9 - (9x + 7)$

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 (10 points).

2) $(5, 0)$ and $(7, -9)$

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

3) Find $f(8.56)$ when $f(x) = -4.57x + 25$.

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

4) $y = 2x + 4$
$3x + y = -16$

Solve the system of equations by the elimination method.

5) $x - 2y = -11$
$4x - 3y = 1$

Find the length of the line segment formed between the pair of points. Write the answer as a squareroot if the answer is not an integer.

6) $(5, 7)$ and $(-6, -3)$

Simplify each radical and combine like terms.

7) $\sqrt{50} - 3\sqrt{128} + 6\sqrt{162}$

8) Graph by completing the table and plotting points. (see reverse side)

$f(x) = 3^x - 2$

See notebook

9) Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.