

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

**Divide. Express the quotient as a mixed number in lowest terms.**

2)  $\frac{-2\frac{1}{4}}{-1\frac{5}{9}}$

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

3)  $3x + 3(3x - 6) = -4 - 2x$

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

4)  $-8x - (5x + 5) > 8 - (7x + 9)$

**Solve.**

5) By switching service providers, a family's telephone bill decreased from about \$50 a month to about \$47. What was the percent of decrease?

**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)**

6)  $(-9, 0)$  and  $(-5, 5)$

**Solve for the literal equation.**

7)  $A = \frac{1}{2}bh$  for b

**Is the following correspondence a function? Explain.**

8)

<b>1</b>	→	<b>-15</b>
<b>-6</b>	→	<b>15</b>
<b>-16</b>	→	<b>-7</b>

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

9) Find  $f(-8.56)$  when  $f(x) = -4.57x - 30$ .